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Criminalization of Air Disasters: What Goal, if Any, is Being Achieved

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CRIMINALIZATION OF AIR DISASTERS: WHAT GOAL, IF ANY, IS BEING ACHIEVED?

ELAINE D. SOLOMON*

DINA L. RELLES**

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“[T]he risk that the threat of criminal prosecution places on the future safety of air travel greatly outweighs any societal benefit in satisfying the inherent human desire for revenge or punishment in the wake of a terrible loss.”¹

I. INTRODUCTION

THE WORLDWIDE TREND of increased criminalization of aviation disasters warrants a critical assessment of what is achieved by this approach. More than ever before, everyone from maintenance personnel to pilots to air traffic controllers to airline executives may be prosecuted for acts of mere negligence that contributed to a crash. Where aviation accidents are more often than not caused by mistake and misfortune, not malice, and administrative and civil remedies are nearly always available, what is gained by prioritizing retribution over investigation?

Criminal investigations concerned with apportioning fault and exacting punishment are often at cross-purposes with technical investigations, which are solely aimed at discovering an accident’s cause so as to prevent recurrence. Judicial and safety investigators may simultaneously vie for access to the same critical evidence, while witnesses, participants, and corporate representatives who possess key information may turn reticent in the face of a perceived threat of criminal prosecution. There is widespread concern in the aviation industry that prioritizing the needs of the public and the victims’ families to avenge the tragic consequences of an air disaster may impede aviation safety by creating a chilling effect on those with the most critical insight into the circumstances of a crash scenario. If the primary aim is to prevent future accidents, criminalization could prove more of a hindrance than a help.

While Annex 13 to the Chicago Convention on International Civil Aviation (Annex 13) mandates that states conduct an independent safety investigation with the sole objective of preventing future accidents,² the potential interference of judicial authorities in the post-crash environment is on the rise—in some countries more than others. This article offers a critical analysis of the prospects for the success of the “non-punitive”

¹ Kenneth P. Quinn, *Battling Accident Criminalization*, AEROSAFETY WORLD, Jan. 2007, at 12.

² Int’l Civil Aviation Org. [ICAO], *Annex 13 to the Convention on International Civil Aviation: Aircraft Accident and Incident Investigation*, at 3-1 (9th ed. 2001) [hereinafter *Annex 13*], available at <http://www.scribd.com/doc/10862579/Icao-Annex-13-9th-edition>.

model of safety investigations in the context of the ever-increasing criminal prosecution of aviation disasters.

We will explore the climate domestically, where although the National Transportation Safety Board (NTSB) enjoys primary authority over air crash investigations and implements a rigorous standard for bringing criminal charges, prosecutions, such as those in the SabreTech case, still occur. We will contrast this with the French system in which a criminal investigation is automatically launched following an aviation disaster and the judicial authority enjoys greater control over site exploration and access to key evidence. Further, we will address the trend toward increased criminal prosecutions worldwide through an examination of the 2001 Linate and Crossair disasters and the troubling consequences they have for both aviation safety and the industry as a whole. We will explore possible solutions for reining in aggressive judicial authorities and protecting the critical free flow of safety information in the aviation community through post-accident safety investigations as well as proactive voluntary incident reporting.

Ultimately, the typical goals of the criminal justice system—retribution, rehabilitation, and deterrence—may not be furthered in the aviation accident context, and the promotion of aviation safety may not be well served by criminal prosecution.

II. THE RATIONALE BEHIND THE INCREASE IN CRIMINAL PROSECUTIONS

It is not clear exactly why criminal prosecutions following aviation disasters have been on the rise. Some speculate that the public's increased desire for corporate accountability in every industry fueled this trend.³ Others attribute it, in part, to rapid technological advancements, such as computer animation of flight paths and the expansive data that can be captured by devices such as the digital flight data recorder (DFDR) that enable investigators to identify both organizational and accident-specific failures with greater certainty.⁴ Whatever the reason, the

³ SOFIA MICHAELIDES-MATEOU & ANDREAS MATEOU, *FLYING IN THE FACE OF CRIMINALIZATION: THE SAFETY IMPLICATIONS OF PROSECUTING AVIATION PROFESSIONALS FOR ACCIDENTS* 3 (2010); Linda Werfelman, *Deterring Criminalization*, *AEROSAFETY WORLD*, Mar. 2008, at 17.

⁴ MICHAELIDES-MATEOU & MATEOU, *supra* note 3.

past decade or two has undeniably seen greater involvement of judicial authorities in the aftermath of aviation disasters.⁵

III. THE REALITY (AND UNCERTAINTY) OF PARALLEL INVESTIGATIONS

In the wake of an aviation accident, two parallel investigations often ensue: (1) the technical, or safety, investigation and (2) the legal investigation.⁶ The purpose of the former is to identify the circumstances and causal factors that produced the accident in an effort to improve aviation safety, whereas the latter is aimed at providing compensation to the victims' families or assigning blame and punishment to those at fault.⁷ Safety investigations are typically conducted according to the international standards established by Annex 13, which prescribes a non-punitive format.⁸ Nevertheless, great variation exists across countries' execution of both their technical and judicial investigations and the interplay between them, resulting in some degree of unpredictability with regard to the potential consequences and exposure following a crash scenario. This uncertainty alone prompts key witnesses in an investigation to adopt a more guarded stance, which, in turn, impedes the discovery of critical information that could improve safety. By way of example, following an examination of the international framework set forth in Annex 13 to the Chicago Convention and the standards adopted by the European Community, this article primarily focuses on the differences between the investigative approaches of the United States and France.

A. THE INTERNATIONAL FRAMEWORK: ICAO ANNEX 13

The International Civil Aviation Organization (ICAO) promulgates standards and recommended practices to be followed by the global aviation community.⁹ Annex 13 sets forth the international requirements for the investigation of aircraft

⁵ See Richard M. Dunn, David Hazouri & Julie Rannik, *Criminalization of Negligent Acts by Employees of U.S. and Foreign Corporations*, 69 DEF. COUNS. J. 17, 17 (2002); Quinn, *supra* note 1, at 11.

⁶ MICHAELIDES-MATEOU & MATEOU, *supra* note 3, at 2.

⁷ *Id.*

⁸ *Id.*; see also *infra* Part III.A.

⁹ ICAO, *Convention on International Civil Aviation*, at 16–17, ICAO Doc. 7300/9 (9th ed. 2006), available at http://www.icao.int/icaonet/arch/doc/7300/7300_9ed.pdf.

accidents and incidents.¹⁰ Annex 13 establishes practical guidelines for conducting accident investigations; for example, it prescribes who shall be responsible for controlling the investigation and maintaining the custody of the aircraft and relevant evidence.¹¹ By default, the State of Occurrence shall institute, and be responsible for, an investigation into the crash's circumstances unless this responsibility is otherwise delegated by mutual consent.¹² ICAO standards emphasize that the "sole objective" of any such investigation "shall be the prevention of accidents and incidents . . . not . . . to apportion blame or liability."¹³

To prioritize the preventative, safety-focused analysis, Annex 13 assigns unrestricted authority over the investigation to the safety investigation agency, giving the investigator-in-charge unhampered access to the wreckage and other relevant material.¹⁴ Moreover, the State of Occurrence is responsible for "protect[ing] the evidence and . . . maintain[ing] . . . custody of the aircraft and its contents."¹⁵ Under Annex 13, certain sensitive records and communications receive protection from disclosure, such as statements taken from persons by the investigation authorities, all communications between the aircraft's operators, and cockpit voice recordings.¹⁶ Otherwise, this information, including information voluntarily communicated by those interviewed during the course of the investigation, "could be utilized inappropriately for subsequent disciplinary, civil, administrative and criminal proceedings."¹⁷ ICAO cautions that "[i]f such information is distributed, it may, in the future, no longer be openly disclosed to investigators. Lack of access to such information would impede the investigation process and seriously affect flight safety."¹⁸

Nevertheless, variation in the implementation and execution of safety investigations exists among countries. Indeed, pursuant to Article 38 of the Convention, each party is required to file

¹⁰ *Annex 13*, *supra* note 2, at 5-1.

¹¹ *Id.* at 3-1, 5-2.

¹² *Id.* at 5-1.

¹³ *Id.* at 3-1.

¹⁴ *Id.* at 5-2. Annex 13 defines the "investigator-in-charge" as "[a] person charged, on the basis of his or her qualifications, with the responsibility for the organization, conduct and control of an investigation." *Id.* at 1-1.

¹⁵ *Id.* at 3-1.

¹⁶ *Id.* at 5-3.

¹⁷ *Id.*

¹⁸ *Id.*

a “Difference” contained in a Supplement to Annex 13 if its national regulations diverge from the practices set forth in Annex 13.¹⁹

The United States, for example, adopts a much more restrictive policy regarding public access to cockpit voice recordings and transcripts.²⁰ “The NTSB has initial control over the cockpit voice recorder [(CVR)] and flight data recorder and is precluded from publicly disclosing any part of the [CVR] if it is relevant to the accident.”²¹ However, there are provisions allowing for the discovery of these protected materials in a judicial proceeding if they are required for a fair trial.²² Indeed, “United States Courts can order the disclosure of [this] . . . information for other than accident investigation purposes,” without consideration of the adverse effects on future investigations.²³ If these items are disclosed in discovery, however, the court is required to prevent their public release.²⁴

France, on the other hand, does not grant total control over the accident wreckage to the lead safety investigator and gives the judicial authority discretion over relevant documents.²⁵

¹⁹ ICAO, *Differences Incorporated by ICAO in Supplements to Annexes Further to a Safety Oversight Audit 2* (Council, Working Paper No. C-WP/11302, 2000) (“Article 38 of the *Convention on International Civil Aviation* (Chicago, 1944) provides, inter alia, that each State is responsible for notifying ICAO promptly of any differences between its own regulations or practices and an international Standard, when it finds it impracticable to comply in all respects with any such international Standard.”).

²⁰ See 49 U.S.C. § 1114(c) (2006); ICAO, *Supplement to Annex 13—Aircraft Accident and Incident Investigation*, at United States 1 (9th ed. 2003) [hereinafter *ICAO Supplement*]. Notably, however, “U.S. law provide[s] significantly more public access to most investigation records than is provided in [ICAO] Annex 13.” ICAO *Supplement*, *supra*. But deliberations related to analysis, findings, probable causes and safety recommendations are restricted to the investigative authority and its staff, and these “solely NTSB internal activities” result in “‘For Official Use Only’ work products” shielded from production under the Freedom of Information Act (FOIA). *Id.* (citing 5 U.S.C. § 552 (2000); 49 C.F.R. § 801.54 (2002); 49 C.F.R. § 831.14 (2002)).

²¹ NTSB Bar Ass’n, *Aviation Professionals and the Threat of Criminal Liability—How Do We Maximize Aviation Safety?*, 67 J. AIR L. & COM. 875, 904 (2002) (citing 49 U.S.C. § 1114(c) (2000)).

²² *Id.* at 905 (citing 49 U.S.C. § 1154(a) (2000)).

²³ ICAO *Supplement*, *supra* note 20.

²⁴ 49 U.S.C. § 1154(a) (2006); ICAO *Supplement*, *supra* note 20.

²⁵ ICAO *Supplement*, *supra* note 20, at France 1.

B. THE EUROPEAN APPROACH: EUROPEAN UNION DIRECTIVES

All member states of the European Union (EU) are parties to the Chicago Convention and are therefore obligated to investigate civil aviation accidents.²⁶ The EU promulgated its own directives to implement the standards set forth in Annex 13 and to provide guidance to member states on how to achieve “cooperation and mutual assistance” in the context of an aviation investigation.²⁷

Directive 94/56/EC, the most current iteration of the applicable directive, draws from a number of Annex 13’s fundamental principles in seeking a uniform framework for aviation accident investigations across the European member states.²⁸ Directive 94/56/EC requires member states to “ensure that every accident or serious incident in civil aviation is subject to an investigation by an *independent* body [whose] only purpose . . . is to prevent future accidents and not to apportion blame or liability.”²⁹ The Directive also establishes guidelines for the publication of final reports and the issuance of safety recommendations.³⁰

Like Annex 13, the EU recognizes the need for safety investigations separate from those carried out by judicial authorities, while acknowledging the tensions that arise from these multiple investigations—particularly, the difficulty of protecting information gathered during the course of the investigation.³¹ The Directive preserves investigators’ “free access to the accident site, wreckage,” and other relevant evidence, but it does not assign responsibility to the State of Occurrence for custody and preservation of the accident site or evidence gathered in the investigation (including witness statements) and does not provide the same protection from disclosure set forth in Annex 13 for draft

²⁶ *Commission Staff Working Document Accompanying the Proposal for a Regulation of the European Parliament and of the Council on Investigation and Prevention of Accidents and Incidents in Civil Aviation-Impact Assessment* § 2.3.1 (Comm’n of the European Cmtys., Working Document No. SEC (2009) 1477, 2009) [hereinafter EC Staff Working Document].

²⁷ *Id.*

²⁸ *Id.* § 2.3.1 & tbl.I. The EU also promulgated Directive 2003/42/EC to address occurrence reporting in civil aviation, establishing a safety reporting system that protects the confidentiality of the reporting party. *Id.* § 2.3.2; see also discussion *infra* Part VI.B.2.

²⁹ EC Staff Working Document, *supra* note 26, § 2.3.1.

³⁰ *Id.* at tbl.I.

³¹ *Id.* § 3.3.

reports and sensitive safety information.³² While some member states have developed legislation aimed to protect sensitive safety information, their protections may not “transfer” to investigations taking place in, or involving, other member states.³³ Also, like Annex 13, the EU directives are only as effective as their implementation by each respective member state, necessarily resulting in variation and uncertainty among different countries.³⁴

C. THE UNITED STATES APPROACH: NTSB GRANTED PRIMARY AUTHORITY

1. NTSB's Primary Jurisdiction

In the United States, Congress delegated the investigation of aviation accidents mandated under ICAO Annex 13 to the NTSB.³⁵ The NTSB is charged with reporting “the facts, circumstances, and cause or probable cause of” these accidents.³⁶ In 1974, “[t]he NTSB . . . was affirmed as ‘an independent Government agency, located within the Department of Transportation, to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations.’”³⁷ In this capacity, “[t]he NTSB investigates all public aircraft accidents in the United States and participates in the investigation of accidents abroad where the United States is the State of registry, operator, designer, or manufacture.”³⁸

There are features built in to the NTSB's structure to ensure its independence; the “Board” itself is comprised of five individuals appointed by the President, with the advice and consent of the Senate, to serve five-year terms.³⁹ No more than three of

³² *Id.* at tbl.I; *see also Annex 13, supra* note 2, at 5-3 (regarding non-disclosure of records).

³³ EC Staff Working Document, *supra* note 26, § 3.3 & n.50 (citing the UK as an example of a State that adopted a memorandum of understanding to ensure the simultaneous independence of, and cooperation among, the Crown Prosecution Service (CPS), the Air Accidents Investigation Branch (AAIB), the Marine Accident Investigation Branch (MAIB), and the Rail Accident Investigation Branch (RAIB)).

³⁴ *Id.* § 3.3.

³⁵ 49 U.S.C. § 1131(a)(1) (2006).

³⁶ *Id.*; *see also* NTSB Bar Ass'n, *supra* note 21, at 894.

³⁷ Paul Stephen Dempsey, *Independence of Aviation Safety Investigation Authorities: Keeping the Foxes from the Henhouse*, 75 J. AIR L. & COM. 223, 265 (2010) (citing 49 U.S.C. § 1901(1) (2006)).

³⁸ *Id.* at 267.

³⁹ *Id.*

these five may be members of the same political party, and at least three members must be appointed on the basis of their technical qualifications.⁴⁰

An NTSB investigation “consist[s] of four phases: (1) launch; (2) fact-finding; (3) analysis; and (4) report production.”⁴¹ The investigator-in-charge (a senior investigator who serves as team leader) appoints groups of specialists (or “parties” to the investigation) in relevant areas of expertise—such as operations, air navigation services, maintenance, weather, and human performance—to develop the investigative record.⁴² While these parties may include aircraft operators and manufacturers, and always include Federal Aviation Administration (FAA) representatives, individuals who hold legal or litigation positions are never involved.⁴³

Although the NTSB is designed to be independent from the litigation process, the practical reality is often more complicated.⁴⁴ Despite the fact that NTSB reports cannot be introduced into evidence, and U.S. law also precludes testimony from an NTSB investigator in court, litigators involved in suits arising out of the investigated crashes often rely heavily upon such reports to assess liability, and indeed, trial may be postponed pending the issuance of the NTSB Final Report.⁴⁵ The NTSB has established regulations aimed at differentiating between (admissible) factual findings about an accident and the (inad-

⁴⁰ *Id.* at 267–68 (citing 49 U.S.C. § 1111(b) (2006)). The Board is “supported by a staff of several hundred.” *Id.* at 267.

⁴¹ *Id.* at 268 (citing U.S. GOVT. ACCOUNTABILITY OFFICE, GAO-07-118, NATIONAL TRANSPORTATION SAFETY BOARD: PROGRESS MADE, YET MANAGEMENT PRACTICES, INVESTIGATION PRIORITIES, AND TRAINING CENTER USE SHOULD BE IMPROVED 12 (2006)).

⁴² Jim Hall, Chairman, Nat’l Transp. Safety Bd., Remarks at the 6th Annual Aviation Litigation Seminar (June 1, 2000) [hereinafter Hall Remarks], *available at* <http://www.nts.gov/speeches/former/hall/jhc000601.htm>.

⁴³ Dempsey, *supra* note 37, at 268 (citing 49 C.F.R. § 831.11(a) (2005)). As then-Chairman of the NTSB, Jim Hall, stated, NTSB investigations “are not conducted to determine the rights or liabilities of any person—rather they are conducted to ensure the safety of our transportation system and the American people who use it.” Hall Remarks, *supra* note 42.

⁴⁴ Dempsey, *supra* note 37, at 270.

⁴⁵ *Id.* at 270–71 (citing 49 U.S.C. §§ 1441(e), 1903(c) (2006)); *see also* 49 U.S.C. § 1154(b) (2006) (“No part of a report of the Board, related to an accident or an investigation of an accident, may be admitted into evidence or used in a civil action for damages resulting from a matter mentioned in the report.”).

missible) Board accident reports, which include the finding of probable cause.⁴⁶

2. *Federal Aviation Administration Involvement*

In the United States, the NTSB is not typically the only agency involved in post-accident investigative efforts. As the FAA has “jurisdiction over aviation professionals, other than military pilots,” it too may conduct aircraft accident investigations, “participate[] in the NTSB’s investigation or, by delegation, conduct[] the fact-finding for the [NTSB].”⁴⁷ Although the NTSB retains “the responsibility to make regulatory recommendations to the FAA to avoid future accidents,” the FAA has actual authority to promulgate and enforce regulations that apply to “airlines, airmen, manufacturers, and airports.”⁴⁸ The FAA, which is led by “an Administrator, who is appointed by the President with the advice and consent of the Senate,” is responsible for considering and responding to the NTSB’s recommendations, and is “required to consider the maintenance and enhancement of safety and security as among [its] highest priorities.”⁴⁹

3. *“Secondary” Role of Criminal Authorities*

While the Federal Bureau of Investigation (FBI) may also conduct its own investigation, Congress clarified that the FBI may only assume “primary authority” over the investigation in limited circumstances—where the “Attorney General, in consultation with the [NTSB Chairman], determines . . . that circumstances reasonably indicate that the accident may have been caused by an intentional criminal act.”⁵⁰ Otherwise, the NTSB retains authority over other government departments in the investigation of civil or public aircraft accidents, and an investigation by the Board “has priority over any investigation by another depart-

⁴⁶ Dempsey, *supra* note 37, at 271 (citing 49 C.F.R. § 835 (2005)). U.S. courts followed suit, with the U.S. Supreme Court and federal district courts attempting to clarify the distinction between “factual findings” and “conclusions”; the former is held admissible, while the latter is not. *See, e.g.,* Beech Aircraft Corp. v. Rainey, 488 U.S. 153 (1988); *In re Air Crash Disaster at Sioux City, Iowa*, on July 19, 1989, 780 F. Supp. 1207 (N.D. Ill. 1991).

⁴⁷ NTSB Bar Ass’n, *supra* note 21, at 894–95.

⁴⁸ Dempsey, *supra* note 37, at 261–62.

⁴⁹ *Id.* at 264 (citing 49 U.S.C. § 40101(d) (2006)).

⁵⁰ 49 U.S.C. § 1131(a)(2)(B) (2006); NTSB Bar Ass’n, *supra* note 21, at 895–96 (citing National Transportation Safety Board Amendments Act of 2000, Pub. L. No. 106-424, 114 Stat. 1883).

ment, agency, or instrumentality of the United States Government.”⁵¹

4. *Threat of Rise of Criminal Prosecutions*

The recent rise of criminal prosecutions in the aviation context threatens the NTSB’s investigative efficiency.⁵² Indeed, in some investigations, “court orders . . . have prevent[ed] the NTSB from testing critical components,” and with increased litigation, Board investigators have been unable to interview transportation operators.⁵³ Delays resulting from prosecutorial activities have “restrained the Board’s capability to make timely determinations of probable cause and issue safety recommendations.”⁵⁴ Importantly, the FAA acknowledged that fear of these criminal prosecutions may hamper the free flow of safety information critical to the NTSB’s evaluation and analysis of an accident’s causes and its recommendations for their avoidance in the future.⁵⁵

As the NTSB observed:

The reticence of witnesses to disclose information may result in error reporting by those individuals who provide testimony and may ultimately impede an investigation. Approximately seventy-

⁵¹ 49 U.S.C. § 1131(a)(2)(A).

⁵² See NTSB Bar Ass’n, *supra* note 21, at 895–96.

⁵³ *Id.* at 879–80.

⁵⁴ *Id.* at 880.

⁵⁵ *Id.* at 880–81. Former NTSB Chairman, Jim Hall, reflected on one such instance during an October 1999 House of Representatives subcommittee hearing involving the NTSB’s inability to effectively carry out its investigative function following a pipeline disaster:

My investigators have been stymied by the prospect of criminal prosecutions . . . and a number of our investigative activities have been suspended because most of the central players will not talk to us. And, prosecutors have asked that we not test the valve of the pipeline until their concerns regarding evidence preservation can be allayed. . . . [F]or now, we simply do not know all we need to know about the pipeline’s operations and its level of safety.

Richard M. Dunn, Sherril M. Colombo & Allison E. Nold, *Criminalization in Aviation: Are Prosecutorial Investigations Relegating Aviation Safety to the Back Seat?*, 38 BRIEF 10, 18 (2009) (citing *Hearing on the Bellingham, Washington, Hazardous Liquid Pipeline Incident Before the Subcomm. on Econ. Dev., Pub. Bldgs., Hazardous Materials, and Pipeline Transp. of the H. Comm. on Transp. and Infrastructure* 106th Cong. 102 (1999) (statement of Jim Hall, Chairman, Nat’l Transp. Safety Bd.)). During his subsequent remarks at the 2000 Annual Aviation Litigation Seminar, then-Chairman Hall noted: “The [pipeline] matter has been resolved, but too much lawyering went on before we were able to test the physical evidence of that tragedy.” Hall Remarks, *supra* note 42.

five per cent of aircraft accidents in the United States involve some form of human error. Thus, the potential for losing the cooperation of individuals who feel they may face criminal accusations is very real.⁵⁶

Indeed, despite the United States' prioritization of the non-punitive safety investigation model executed by the NTSB, witnesses have reason to be wary. Under U.S. law, if the FAA is involved in the investigation efforts, "the [Federal Aviation Regulations (FARs)] direct FAA employees to report any suspected violation of a criminal provision of the Federal Aviation Act . . . to the FAA's legal department," which, if appropriate, may then forward the information to the Department of Justice for criminal prosecution.⁵⁷

While criminal prosecutions following aviation disasters may be less common in the United States than elsewhere, troubling examples, such as the SabreTech prosecution, still exist.

5. *The SabreTech Prosecution*

The NTSB characterized the state and federal prosecutions of SabreTech, Inc. (SabreTech) and three of its employees as "the first full-scale criminal investigation into the facts and circumstances underlying a major U.S. aviation disaster."⁵⁸

On May 11, 1996, ValuJet Flight 592 crashed into the Florida Everglades after departing from Miami International Airport, killing all 110 passengers and crew onboard.⁵⁹ Following prompt investigation of the accident by the NTSB and FAA, it became apparent that the accident was likely caused by "a fire in the cargo hold fueled by oxygen generators that were [improperly] placed aboard the aircraft as COMAT (Company Owned Materials)."⁶⁰ The NTSB determined that the generators ignited shortly after takeoff, causing the crash.⁶¹

⁵⁶ NTSB Bar Ass'n, *supra* note 21, at 904.

⁵⁷ *Id.* (citing 14 C.F.R. § 13.23(b) (2002)).

⁵⁸ *Id.* at 883. Indeed, SabreTech was the first U.S. aviation company to be criminally prosecuted following an American airline crash. Ken Kaye & Robin Benedick, *Judge Puts an End to ValuJet Saga*, SUNSENTINEL.COM (Aug. 28, 2002), http://articles.sun-sentinel.com/2002-08-28/news/0208280106_1_sabretech-aviation-safety-valujet [hereinafter *End to Saga*].

⁵⁹ NTSB Bar Ass'n, *supra* note 21, at 898.

⁶⁰ *Id.*

⁶¹ *Id.* at 883. "Today, . . . all airliner cargo compartments must have fire suppression and smoke detection equipment." *End to Saga*, *supra* note 58.

"SabreTech was ValuJet's maintenance contractor, whose employees" were accused of improperly packaging and labeling the expired chemical oxygen generators before shipping them to ValuJet.⁶² In brief, "SabreTech mechanics had signed [off on] inaccurate work cards indicating that safety caps had been installed on [the] oxygen generators," which had been removed from three ValuJet MD-80s, when in fact they had not.⁶³ The mechanics properly tagged the generators as unserviceable and "out of date" and took them to the ValuJet hold area of the SabreTech facility, where they believed the generators would be discarded.⁶⁴ Without the mechanics' knowledge, "the generators were later returned to the ValuJet ramp area [for loading onto the aircraft] by a shipping and receiving clerk who mistakenly believed that the generators were empty."⁶⁵

a. Involvement of Criminal Authorities

Early on, the NTSB and FAA were competing alongside criminal investigators for access to relevant evidence.⁶⁶ The FBI executed a search warrant at SabreTech's Miami facility, served grand jury subpoenas on SabreTech and ValuJet, and FBI and local law enforcement agents even made nighttime visits to company employees at their homes, seeking interviews.⁶⁷

In 1997, SabreTech and three of its employees were federally charged "in a 24-count indictment for conspir[acy] to falsify aircraft records, falsifying aircraft records, violating hazardous materials regulations, and placing a destructive device on board an aircraft."⁶⁸ By criminally charging SabreTech, the govern-

⁶² NTSB Bar Ass'n, *supra* note 21, at 883.

⁶³ *Id.* at 890-91.

⁶⁴ *Id.* at 890-91, 899.

⁶⁵ *Id.* at 891.

⁶⁶ *Id.* at 899.

⁶⁷ *Id.* at 899-900. In addition to the U.S. federal charges, in 1999, the Miami-Dade State Attorney brought murder, manslaughter, and environmental crime charges against SabreTech. Ina Paiva Cordle, *ValuJet Crash: Case Closed*, MIAMI HERALD, Dec. 8, 2001, at 1C. Pursuant to a 2001 plea bargain, SabreTech pled no contest to one count of unlawful transport of hazardous waste, and its parent company, Sabreliner, paid \$500,000. *Id.* The 110 counts of murder and 110 counts of manslaughter were dropped. *Id.*

⁶⁸ Dunn, Hazouri & Rannik, *supra* note 5, at 19; *see also* Dunn, Colombo & Nold, *supra* note 55, at 15. Notably, several of the counts involving the allegedly falsified maintenance paperwork were unrelated to the crash at issue, signaling the broad exposure a company may face once subject to criminal inquiry. Dunn, Hazouri & Rannik, *supra* note 5, at 19.

ment characterized its employees' actions as *willful*.⁶⁹ While the jury acquitted the employees of all charges against them individually, and SabreTech itself of some of the more serious offenses (such as conspiracy and knowingly and willfully making false statements on maintenance records), it found the company guilty of recklessly causing the transportation of hazardous materials in air commerce and improper training.⁷⁰ The Eleventh Circuit ultimately vacated the recklessness convictions against the company, noting, *inter alia*, that "[t]he record reflects that these aviation repair station personnel committed mistakes, but they did not commit crimes," and moreover, they "did not intend to kill" the accident victims.⁷¹

Despite the jury's acquittals and the appellate court's reversals, the charging decision alone is a sobering indication of the potential for such prosecutions—whereby criminal intent is attributed to mere negligence—even in the United States.⁷²

D. THE FRENCH APPROACH: INCREASED JUDICIAL INVOLVEMENT

While France's accident investigation framework may initially appear comparable to that of the United States, its activist judiciary creates a markedly different dynamic.

⁶⁹ NTSB Bar Ass'n, *supra* note 21, at 891.

⁷⁰ Dunn, Colombo & Nold, *supra* note 55, at 15. ValuJet, while never criminally charged, was grounded by the FAA in June 1996, and never fully recovered from the reputational damage following the crash. *ValuJet Grounded*, CNN.COM (June 17, 1996), <http://www.cnn.com/us/9606/17/valujet.grounded/index.html>; *With ValuJet in Past, AirTran Soars as Others Struggle*, USA TODAY (Aug. 18, 2003), <http://www.usatoday.com/travel/news/features/2003/2003-08-18-airtran.htm> [hereinafter *ValuJet in Past*]. It merged with AirTran Airways one year later. *ValuJet in Past*, *supra*.

⁷¹ *United States v. SabreTech, Inc.*, 271 F.3d 1018, 1019, 1025 (11th Cir. 2001). The appellate court also concluded that applicable federal law did not recognize a valid cause of action for the reckless handling of hazardous materials. *See id.* at 1020, 1022–24.

⁷² *See* David Esler, *Flight Risk: The Threat of Criminalization*, AVIATION WEEK (Mar. 10, 2009), http://www.aviationweek.com/aw/generic/story_generic.jsp?channel=bca&id=news/bca0309p1.xml (quoting aviation attorney, Eileen Gleimer of Crowell & Moring LLP, as observing that "[a]lthough Title 49 of the U.S. Code provides for criminal penalties for certain acts relating to aviation . . . they generally involve willful and intentional violations"). Gleimer goes on to note that "defining and proving that an action rises to the level of a criminal act is not an easy task in most instances," which may explain the limited number of criminal prosecutions in aviation cases in the United States. *Id.*

1. *The BEA*

Like the NTSB, “[t]he Bureau d’Enquêtes et d’Analyses pour la sécurité de l’aviation civile (BEA) was established in 1946 to investigate” aircraft accidents and to prepare reports regarding their causes.⁷³ The BEA is independent, by statute, from any other authority and conducts technical investigations not to establish guilt, but to gather information likely to prevent future accidents.⁷⁴ Indeed, in the “Foreword” of a BEA report, it is noted that in accordance with Annex 13, EC Directive 94/56, and the French Civil Aviation Code, “the analysis of the accident and the conclusions and safety recommendations contained in this report are intended neither to apportion blame, nor to assess individual or collective responsibility. The sole objective is to draw lessons from this occurrence which may help to prevent future accidents or incidents.”⁷⁵

2. *Significant Judicial Involvement*

Nevertheless, criminal proceedings commonly follow BEA investigations. Indeed, whereas it is “extremely rare” for a U.S. flightcrew to face criminal charges,⁷⁶ in France, it is routine for prosecutors to immediately launch a criminal investigation following an aviation disaster, and ultimately to file charges for involuntary manslaughter against any aviation professional—from pilots to maintenance mechanics to chief executives of aviation regulatory authorities—involved in the accident.⁷⁷

⁷³ Dempsey, *supra* note 37, at 253.

⁷⁴ *Id.* (citing Loi 99-243 du 29 mars 1999 [Law 99-243 of March 29, 1999], JOURNAL OFFICIEL DE LA RÉPUBLIQUE FRANÇAISE [J.O.] [OFFICIAL GAZETTE OF FRANCE], Mar. 29, 1999, art. L711-2).

⁷⁵ BUREAU D’ENQUÊTES ET D’ANALYSES POUR LA SÉCURITÉ DE L’AVIATION CIVILE [BEA], Rapport f-sc000725, ACCIDENT SURVENU LE 25 JUILLET 2000 AU LIEU-DIT LA PATTE D’OIE DE GONESSE (95) AU CONCORDE IMMATRICULÉ F-BTSC EXPLOITÉ PAR AIR FRANCE [Accident on July 25, 2000, at La Patte d’Oie in Gonesse (95) to the Concorde Registered F-BTSC operated by Air France] 2 (2000), available at www.bea.aero/docs/pa/2000/f-sc000725/pdf/f-sc000725.pdf.

⁷⁶ Evan P. Singer, *Recent Developments in Aviation Safety: Proposals to Reduce the Fatal Accident Rate and the Debate over Data Protection*, 67 J. AIR L. & COM. 499, 519 (2002) (“[T]he criminal prosecution of pilots remains extremely rare in the United States.”).

⁷⁷ See discussion *infra* at Part III.D.3.a; CODE DE L’AVIATION CIVILE art. R.142-4 (Fr.), available at http://www.legifrance.gouv.fr/affichCodeArticle.do?sessionId=16E7666C2C7C57F694EA1A342AC1C274.tpdjo15v_2?pidArticle=LEGIARTI000006844567&cidTexte=LEGITEXT000006074234&dateTexte=20110321 (“If the accident or incident causes damages to transported persons or goods, the public prosecutor is to be kept informed.”).

The structure of the French system allows many courtesies to the investigating judicial authority. For instance, unlike in the United States, BEA reports are not shielded from admission into evidence in the judicial context.⁷⁸ As mentioned earlier, France diverges from Annex 13 in that the investigator-in-charge is not granted total control over the accident wreckage and all relevant documents; instead, the latter generally remain under the control of the judicial authority.⁷⁹

French law establishes broad jurisdiction to hear cases arising out of aviation disasters—if even one plaintiff, one defendant, or a defendant’s insurer is a French citizen, the French courts may have jurisdiction over the entire action, regardless of the crash locale.⁸⁰ Moreover, French criminal procedure allows any individual harmed by an offense to file a complaint asking a criminal prosecutor to investigate the crash.⁸¹ While the decision to launch a criminal investigation lies with the prosecutor, if no investigation is initiated within three months or if the prosecutor affirmatively declines to prosecute, then the individual can file a complaint before an investigative judge (*plainte avec constitution de partie civile*)—which alone initiates a criminal investigation into an air crash.⁸² In these complaints, victims seek financial indemnification for damages suffered as a result of the criminal offense upon a finding of guilt by a French criminal court.⁸³

French judges also have the authority to appoint an “expert” to gather evidence, including written documentation, on technical questions relating to the investigation from any third party—even those abroad—and issue a report, before a suit is ever filed.⁸⁴ Third parties are required to comply with the expert’s requests, provided the information sought is sufficiently specific.⁸⁵ In addition, the judge enjoys the assistance of “special

⁷⁸ Dempsey, *supra* note 37, at 254 (citing Simon Foreman, *Aviation Accidents and the French Courts*, 20 AIR & SPACE LAW. 1, 16 (2005)).

⁷⁹ ICAO *Supplement*, *supra* note 20, at France 1.

⁸⁰ Dempsey, *supra* note 37, at 255 (citing CODE CIVIL [C. CIV.] art. 14 (Fr.)).

⁸¹ CODE DE PROCÉDURE PÉNALE [C. PR. PEN.] art. 85 (Fr.).

⁸² *Id.* arts. 85, 87. Further, if a criminal investigation has already been initiated by the criminal prosecutor, the victim can join the pending criminal action as a plaintiff at any time by filing a *plainte avec constitution de partie civile*. *Id.* art. 87.

⁸³ See Dempsey, *supra* note 37, at 253–56.

⁸⁴ CODE DE PROCÉDURE PÉNALE [C. PR. PEN.] arts. 156, 158, 166 (Fr.).

⁸⁵ *Id.* art. 164.

aviation police—*Gendarmerie des Transports Aériens*—who may take witnesses into custody and search premises.”⁸⁶

One notable example of the aggressive French judiciary at work was the lengthy criminal investigation and prosecution that followed the 1992 Air Inter crash.

3. *Air Inter Crash (near Strasbourg, France)*

On January 20, 1992, an Air Inter Airbus A320 flight from Lyon to Strasbourg crashed into “the cloud-shrouded Vosges mountains” while attempting a VOR/DME approach, killing eighty-seven of the ninety-six people onboard.⁸⁷ While various factors contributed to the crash of Flight 148, the BEA concluded that the accident occurred because the pilots inadvertently left the autopilot set in the Vertical Speed mode, instead of the Flight Path Angle mode, when they entered a “3.3” descent angle.⁸⁸ As a result, the autopilot interpreted this as a command to descend at the rapid rate of 3,300 feet per minute.⁸⁹

a. Criminal Consequences

Following the crash, several indictments ensued: Airbus’s then-engineering chief, Bernard Ziegler, was indicted over the design of the A320 cockpit and the aircraft’s possibly faulty DME navigation system.⁹⁰ The absence of a ground proximity warning system in the Airbus prompted indictments against the then-

⁸⁶ Dempsey, *supra* note 37, at 255 (citing Foreman, *supra* note 78, at 15).

⁸⁷ *France Prosecutes Six over 1992 Air Inter Crash*, FLIGHT GLOBAL (Mar. 21, 2006), <http://www.flightglobal.com/articles/2006/03/21/205526/france-prosecutes-six-over-1992-air-inter-crash.html> [hereinafter *France Prosecutes Six*]; Don Phillips, *Manslaughter Trial of 6 Starts in 1992 Air Crash*, N.Y. TIMES (May 2, 2006), <http://www.nytimes.com/2006/05/02/world/europe/02iht-trial.html> [hereinafter *Manslaughter Trial of 6*].

⁸⁸ *France Prosecutes Six*, *supra* note 87; *Accident Description*, AVIATION SAFETY NETWORK, <http://aviation-safety.net/database/record.php?id=19920120-0> (last visited Sept. 5, 2011).

⁸⁹ Bureau d’Enquêtes et d’Analyses pour la sécurité de l’aviation civile [BEA], *Committee Report on the Inquiry into the January 20, 1992 Accident near Mount Sainte-Odile (Bas Rhin) of Airbus A 320 Registration Number F-GGED, Operated by Air Inter*, Report No. F-ED920120 (Nov. 26, 1993), available at <http://www.bea.aero/docspa/1992/f-ed920120/htm/f-ed920120.html>; see also *Accident Description*, *supra* note 88 (providing a summary of the November 26, 1993, BEA Report in English).

⁹⁰ *France Prosecutes Six*, *supra* note 87; *Manslaughter Trial of 6*, *supra* note 87.

head of DGAC⁹¹ technical control and its director general (who participated in the decision not to require this device in French aircraft), as well as the chief executive of Air Inter (a predecessor to Air France).⁹² Finally, the airline operations director at the time of the accident, Jacques Rantet, faced charges because both of the A320 pilots had relatively little experience on the fly-by-wire twinjet.⁹³

On November 7, 2006, a French court cleared all five aviation officials and one Airbus executive of criminal charges, but found Airbus and Air France liable for the pain and suffering of the victims' families, without specifying a damages figure.⁹⁴

The aviation industry viewed the Air Inter crash as a reflection of the concerning trend to criminalize aviation officials in the wake of an accident. The media reported on the "relief" felt by those involved in aviation safety upon the French court's November 2006 verdict acquitting all six criminally charged officials.⁹⁵ Indeed, this proceeding was closely monitored by the aviation community because those on trial faced actual prison time—unlike in cases in other developed countries in which implicated companies typically pay monetary damages.⁹⁶ It was not until three years later, in 2009, that "France's highest court finally confirmed the acquittal of all those originally accused of responsibility" for this 1992 crash—seventeen years earlier.⁹⁷

During this substantial delay, the Airbus autopilot was modified so that a Vertical Speed setting would be displayed as a four-digit number to avoid confusion with the Flight Path Angle mode.⁹⁸ With appropriate safety recommendations already implemented, one must wonder what purpose is served by the prosecution of those accused decades after the crash.

⁹¹ Direction Générale de l'Aviation Civile (DGAC) is the French civil aviation authority.

⁹² *France Prosecutes Six*, *supra* note 87; *Manslaughter Trial of 6*, *supra* note 87.

⁹³ *France Prosecutes Six*, *supra* note 87.

⁹⁴ Nicola Clark & Don Phillips, *Court Clears 6 of Criminal Charges in Crash of French Jetliner in 1992*, N.Y. TIMES (Nov. 8, 2006), <http://query.nytimes.com/gst/fullpage.html?res=9F02E5DF1E3FF93BA35752C1A9609C8B63>.

⁹⁵ Don Phillips, *Free Flow: No Clear Signals in Aviation Verdict*, N.Y. TIMES (Oct. 8, 2006), <http://www.nytimes.com/2006/11/08/business/worldbusiness/08iht-transcol09.3456590.html> [hereinafter *Free Flow*].

⁹⁶ See *Manslaughter Trial of 6*, *supra* note 87.

⁹⁷ Angela Doland, *French Court to Rule on Concorde Crash*, MSNBC.COM (Dec. 5, 2010), http://www.msnbc.msn.com/id/40517609/ns/world_news-europe/t/french-court-rule-concorde-crash/.

⁹⁸ *Accident Description*, *supra* note 88; see *France Prosecutes Six*, *supra* note 87.

As one source noted, “[i]n France, [criminal] prosecutions can take up to 15 years under the Napoleonic Code, which stipulates that fatal accidents must be investigated to establish blame. . . . People can face decades of criminal prosecution” under the French system.⁹⁹ Following the acquittals of aviation officials charged in the Air Inter crash, the *New York Times* noted that the aviation industry’s “behind-the-scenes assumption had been that the court would do what French courts almost always do: find someone guilty of criminal activity when there’s a crash.”¹⁰⁰ And in anticipation of the recent Air France Concorde verdict, discussed further *infra*, the press reported that “[i]n France, unlike in many other countries, plane crashes routinely lead to trials to assign criminal responsibility. It is common for cases to drag on for years.”¹⁰¹ In fact, “[i]t is routine French practice to bring charges of ‘causing unintentional death’ against managers and others with responsibility in a chain of events leading to fatal accidents. Prison sentences are very rare but heavy fines can be imposed.”¹⁰² Indeed, France has been identified as “one of a handful of countries that routinely seek criminal indictments in transportation accidents, regardless of whether there is clear evidence of criminal intent or negligence.”¹⁰³

While many in the international aviation community were hopeful that the court’s ultimate acquittal of the Air Inter accused would signal a decline in criminal prosecutions,¹⁰⁴ the recent Air France Concorde verdict serves as a troubling reminder that in some countries, prosecution and conviction of companies and individuals alike in the wake of an aviation disaster remain the norm.

⁹⁹ Esler, *supra* note 72 (quoting President and CEO of the Flight Safety Foundation, William Voss).

¹⁰⁰ *Free Flow*, *supra* note 95.

¹⁰¹ *Concorde Crash: Continental Airlines Guilty of Involuntary Manslaughter*, MSNBC.COM (Dec. 6, 2010), <http://www.msnbc.msn.com/id/40527031/ns/travel/%20Continental%20Airlines%20Guilty> (last visited May 30, 2011) [hereinafter *Continental Airlines Guilty*].

¹⁰² Charles Bremner, *Continental Airlines Faces Manslaughter Charges over Paris Concorde Crash*, TIMES (Fr.) (Mar. 12, 2008), <http://www.timesonline.co.uk/tol/news/world/europe/article3539777.ece>.

¹⁰³ Nicola Clark, *Trial Opens in Concorde Disaster*, N.Y. TIMES (Feb. 1, 2010), <http://www.nytimes.com/2010/02/02/world/europe/02concorde.html?ref=nicolaclark>.

¹⁰⁴ See Quinn, *supra* note 1 (expressing hope that the Air Inter acquittals “represent[] a watershed event, after which prosecutors and judges will exercise restraint about bringing criminal investigations”).

4. *Air France Concorde Crash (Paris, France)*

On July 25, 2000, an Air France Concorde, Flight 4590, crashed into a nearby Paris hotel moments after takeoff from Charles de Gaulle International Airport, killing all 109 passengers and crew onboard and claiming the lives of an additional four victims on the ground.¹⁰⁵

The BEA conducted the official investigation into the crash, but a parallel investigation by the prosecutors' office also ensued.¹⁰⁶ Early on, investigators from both groups concluded that a Continental Airlines DC-10 that took off moments earlier had dropped titanium debris, part of a thrust reverser, onto the runway, including a titanium strip that gashed the Concorde tire, causing a piece of rubber to fly into the aircraft's fuel tank.¹⁰⁷ This ultimately led to a major fuel leak from the compromised tank, which ignited, causing the supersonic jet to erupt into flames.¹⁰⁸

a. Criminal Investigation and Charges

Five years after the crash, French prosecutors placed Continental under investigation for alleged manslaughter and involuntary injury, contending that the carrier's use of titanium, instead of a softer metal, violated FAA regulations.¹⁰⁹ France's wide-sweeping prosecutorial charges also reached John Taylor, a Continental mechanic who allegedly fitted the non-standard titanium strip, and Stanley Ford, a Continental maintenance official.¹¹⁰

The French judicial inquiry also targeted executives from Concorde-maker Aerospatiale because their investigation revealed that the jet's fuel tanks lacked sufficient protection from shock—a weakness the manufacturer apparently had been

¹⁰⁵ Doland, *supra* note 97.

¹⁰⁶ *Concorde Chief Suspected over Fatal Crash*, TIMES ONLINE (Sept. 27, 2005), <http://www.timesonline.co.uk/tol/news/world/europe/article571903.ece> [hereinafter *Concorde Chief Suspected*].

¹⁰⁷ Doland, *supra* note 97.

¹⁰⁸ *Id.*

¹⁰⁹ *Concorde Chief Suspected*, *supra* note 106; *Ex-Concorde Head Quizzed on Crash*, BBC NEWS, <http://news.bbc.co.uk/2/hi/europe/4285832.stm> (last updated Sept. 27, 2005).

¹¹⁰ Bremner, *supra* note 102. Continental vigorously fought the charges, contending that the Concorde caught fire well before it reached the metal strip on the runway. See *Continental Denies Responsibility for Crash as Concorde Trial Begins*, DW-WORLD.DE (GER.) (Feb. 3, 2010), <http://www.dw-world.de/dw/article/0,,5197016,00.html> [hereinafter *Continental Denies Responsibility*].

aware of for decades.¹¹¹ Henri Perrier, a former head of the Concorde program, was investigated and charged for involuntary manslaughter, accused of having been informed about the aircraft's faults, including a series of prior tire incidents, but taking no action.¹¹² Claude Frantzen, former director of technical services at DGAC, was similarly charged.¹¹³

By the time the criminal trial began in 2010, the victims' families had been financially compensated nearly a decade earlier,¹¹⁴ and the Concorde had long been permanently retired from service.¹¹⁵ Only the criminal trial lingered on. For the anticipated cost of more than \$4.2 million,¹¹⁶ the complex four-month criminal trial boiled down to a singular purpose: to assign blame.¹¹⁷

In December 2010, "[a] French court found Continental Airlines and one of its mechanics guilty of involuntary manslaughter" as a result of the devastating Concorde crash over a decade earlier.¹¹⁸ After the airline was found liable for "defective maintenance," Continental was fined the equivalent of nearly \$300,000 and ordered to pay \$1.32 million in damages and interest to Concorde's operator, Air France.¹¹⁹ The court also ruled that Continental should pay 70% of any compensation claims to the victims' families.¹²⁰ Continental mechanic, John

¹¹¹ *Concorde Chief Suspected*, *supra* note 106.

¹¹² *Ex-Concorde Head Quizzed on Crash*, *supra* note 109.

¹¹³ Bremner, *supra* note 102.

¹¹⁴ Air France reached a \$150 million civil settlement with the victims' families in 2001. Clark, *supra* note 103. The airline joined the criminal case as a civil party in an effort to recoup a portion of this financial payout from Continental. *Id.*

¹¹⁵ *Id.*; see also *Continental Denies Responsibility*, *supra* note 110 (both Air France and British Airways retired the aircraft from service in 2003, ending the world's only supersonic commercial service).

¹¹⁶ *Continental Denies Responsibility*, *supra* note 110.

¹¹⁷ *Continental Airlines Guilty*, *supra* note 101. The trial involved testimony from scores of witnesses and experts, 90 volumes of case files, and 534 pieces of evidence. *Concorde Crash Manslaughter Trial Begins in France*, BBC News, <http://news.bbc.co.uk/2/hi/8492561.stm> (last updated Feb. 2, 2010).

¹¹⁸ Lisa Bryant, *Paris Court Finds Continental Responsible for Concorde Crash*, VOANews.com (Dec. 6, 2010), <http://www.voanews.com/english/news/europe/Paris-Court-Finds-Continental-Responsible-for-Concorde-Crash-111386879.html>.

¹¹⁹ Henry Samuel, *Patriotic French Court Rules U.S. Airline Caused Concorde Disaster*, CANADA.COM (Dec. 6, 2010), <http://www.canada.com/news/Patriotic+French+court+rules+airline+caused+Concorde+disaster/3932987/story.html?id=3932987>.

¹²⁰ *Continental 'Responsible' for Concorde Crash in 2000*, BBC News (Dec. 6, 2010), <http://www.bbc.co.uk/news/world-europe-11923556>. As Air France has already paid out 100 million euros in compensation to these relatives, it may seek to recoup some of that money from Continental. *Id.*

Taylor, received a fifteen-month suspended prison sentence and a fine for faulty manufacturing and installation of the titanium strip believed to be at the root of the crash.¹²¹

Continental appealed the ruling, which one of its lawyers characterized as “protectionist,” serving only French interests, not justice.¹²²

5. *Air France Flight 447 Crash (Atlantic Ocean, en route to Paris, France from Rio de Janeiro, Brazil)*

Most recently, France’s tendency to criminally prosecute following a major air disaster is evident in the investigation of the Air France Flight 447 crash in June 2009. On June 1, 2009, an Air France Airbus A330, registration number F-GZCP, crashed into the Atlantic Ocean on a flight from Rio de Janeiro, Brazil to Paris, France, killing all 228 people onboard.¹²³ While the black box flight recorders were finally discovered in May 2011,¹²⁴ at the time of this writing, the investigation into the cause of this accident was ongoing. It appears that approximately four hours into the flight, the aircraft encountered severe high-altitude thunderstorms in the Inter-Tropical Convergence Zone (ITCZ), a region known for its turbulent weather patterns.¹²⁵ The flight-crew, facing inconsistent airspeed indications and the disconnection of the automated systems onboard, failed to bring the aircraft under control.¹²⁶ The aircraft ultimately stalled at high altitude and plummeted from the sky at a vertical speed of approximately 10,000 feet per minute.¹²⁷

It was likely a confluence of events that brought about this tragedy, and the cause of the crash is far from confirmed. The latest reports—including that issued by the BEA—point, in large

¹²¹ *Id.*

¹²² Samuel, *supra* note 119. Air France, the Concorde’s operator, was government-owned at the time. *Id.* The court also cleared the three French aviation officials charged in the crash, placing the blame exclusively on the Houston-based airline. *Id.*

¹²³ See BEA, *Accident to the Airbus A330-203 Flight AF 447 on 1st June 2009: Update on Investigation*, at 1–4 (May 27, 2011), available at <http://www.bea.aero/fr/enquetes/vol.af.447/point.enquete.af447.27mai2011.en.pdf>.

¹²⁴ See 16 May 2011 Briefing, BEA, <http://www.bea.aero/en/enquetes/flight.af.447/info16may2011.en.php> (last visited Sept. 25, 2011).

¹²⁵ BEA, *Interim Report n°3 on the Accident on 1st June 2009 to the Airbus A330-203, Registered F-GZCP, Operated by Air France, Flight AF 447 Rio de Janeiro-Paris*, at 9–11 (July 29, 2011) [hereinafter *Third Interim Report*], available at <http://www.bea.aero/en/enquetes/flight.af.447/flight.af.447.php>.

¹²⁶ *Id.* at 7.

¹²⁷ *Id.* at 10.

part, to pilot error in failing to appropriately respond to the aircraft stall in the final minutes of the flight.¹²⁸ The BEA is still analyzing the accident data and has yet to issue its final report.

Nevertheless, even before the black boxes were discovered, in March 2011 French Judge Sylvie Zimmerman filed preliminary manslaughter charges against both Airbus and Air France.¹²⁹ “Preliminary charges allow investigating judges to continue their probe before deciding whether to send the case to trial.”¹³⁰ Top officials from Airbus considered this a premature decision, while Air France CEO Pierre-Henri Gorgeon vowed to protest the charges as “unfounded.”¹³¹ While formal charges have yet to be issued, the prompt initiation of the criminal process underscores France’s willingness to prosecute in the wake of aircraft disasters, even when evidence as to the cause of the accident is lacking or preliminary.

IV. BROADER TREND: INTERNATIONAL INCREASE IN CRIMINAL PROSECUTIONS AND ITS IMPLICATIONS

France is not alone. Elsewhere internationally, it has become far more common for prosecutors to pursue criminal charges against aviation professionals following a crash—with troubling consequences for aviation safety.

A. LINATE AIRPORT DISASTER (MILAN, ITALY)

On October 8, 2001, Scandinavian Airlines Flight 686 (a Boeing MD-87 plane, registration SE-DMA) collided on take-off with a Cessna 525-A (registration D-IEVX), killing all passengers onboard both aircraft and an additional four people on the ground.¹³² The Scandinavian Airlines Systems (SAS) operated

¹²⁸ Robert Wall & Jens Flottau, *Lessons of Air France 447 Start to Emerge*, AVIATION WEEK (Aug. 8, 2011), http://www.aviationweek.com/aw/generic/story.jsp?id=news/awst/2011/08/08/AW_08_08_2011_p39-355091.xml&headline=Lessons%20Of%20Air%20France%20447%20Start%20To%20Emerge&channel=awst. See generally *Third Interim Report*, *supra* note 125.

¹²⁹ Pierre-Antoine Souchard, *Air France Faces Charges over 2009 Crash*, ABC NEWS (Mar. 18, 2011), <http://abcnews.go.com/Business/wireStory?id=13164386>.

¹³⁰ *Air France Faces Charges over 2009 Crash*, FOXNEWS.COM (Mar. 18, 2011), <http://www.foxnews.com/world/2011/03/18/air-france-faces-charges-200-crash>.

¹³¹ Souchard, *supra* note 129.

¹³² Agenzia Nazionale Per La Sicurezza Del Volo [ANSV], *Final Report: Accident Involved Aircraft Boeing MD-87, Registration SE-DMA and CESSNA 525-A, Registration D-IEVX, Milano Linate Airport, October 8, 2001* at 1, ANSV Doc. N. A/1/04 (Jan. 20, 2004) [hereinafter ANSV Final Report (Linate)].

MD-87 was bound for Copenhagen, Denmark, while the Cessna Citation was on a sales demonstration flight to Paris.¹³³ The accident, which took place when the airport was shrouded in thick fog, occurred when the Cessna mistakenly taxied along the airport's southern route, which intersects the main runway, from which the SAS MD-87 was given clearance to take off.¹³⁴ All four passengers and crew in the Cessna were killed on impact.¹³⁵ The MD-87, which lost its right engine in the collision, attempted to take off, but the left engine suffered significant thrust reduction as a result of debris and was unable to sustain flight.¹³⁶ The pilot's maneuvers to reverse thrust and apply the brakes were insufficient to halt the momentum of the jet, which descended and proceeded to crash into a baggage handling building located just off the runway, bursting into flames.¹³⁷

Italy's Agenzia Nazionale per la Sicurezza del Volo (ANSV) investigated the runway collision and concluded that the "immediate cause" was the incursion of the Cessna aircraft on the active runway.¹³⁸ Nevertheless, additional airport deficiencies—such as the absence of a functioning ground radar system and insufficient guidance signs along the taxiways, among others—were noted as other causes, along with qualification issues with the Citation flightcrew, who were not certified to operate in such low-visibility conditions.¹³⁹

1. *Criminal Consequences*

In 2004, "[a] Milan court found four aviation officials guilty of manslaughter and negligence for their" alleged roles in the 2001 disaster at Linate.¹⁴⁰ The airport director, Vincenzo Fusco, and the air traffic controller on duty at the time, Paolo

¹³³ Charles Alcock, *Jail for Four with Role in CJ2/MD-87 Collision*, AVIATION INT'L NEWS (May 2004), http://www.ainonline.com/ain-and-ainalerts/aviation-international-news/single-publication-story/browse/0/article/jail-for-four-with-role-in-cj2md-87-collision-7217/?no_cache=1&tx_ttnews%5Bmode%5D=1.

¹³⁴ ANSV Final Report (Linate), *supra* note 132, at 162.

¹³⁵ *Id.* at 1.

¹³⁶ *Id.* at 8.

¹³⁷ *Accident Description*, AVIATION SAFETY NETWORK, <http://aviation-safety.net/database/record.php?id=20011008-0> (last visited Sept. 5, 2011).

¹³⁸ ANSV Final Report (Linate), *supra* note 132, at 162; David Learmount, *ATC Body Blasts Linate Verdicts*, FLIGHT GLOBAL (Apr. 27, 2004), <http://www.flightglobal.com/articles/2004/04/27/180802/atc-body-blasts-linate-verdicts.html>.

¹³⁹ ANSV Final Report (Linate), *supra* note 132, at 162–63.

¹⁴⁰ Jason Horowitz, *Europe: Italy: Aviation Officials Sentenced in Country's Worst Crash*, N.Y. TIMES (Apr. 17, 2004), <http://www.nytimes.com/2004/04/17/world/world-briefing-europe-italy-aviation-officials-sentenced-country-s-worst-crash.html>.

Zacchetti, were each given eight-year prison sentences, while six-and-a-half year terms were handed down to Francesco Federico, who had overall management responsibility for Milan's two airports (Malpensa and Linate), as well as Sandro Gualano, the former chief executive of Italy's air traffic control agency, ENAV.¹⁴¹ The ruling represents the first time prison sentences were ever handed down in Italy as a result of an aviation accident.¹⁴² Reports reflected the satisfaction and comfort felt by victims' relatives at news of the convictions.¹⁴³

A year later, four more individuals were convicted in connection with the Linate crash—three ENAV employees and one airport official—each receiving prison sentences between three years and four years and four months.¹⁴⁴ Three others were acquitted in this second verdict—two employees of SEA, the company that operates Milan airports, and another ENAV official.¹⁴⁵

2. *Italy's Independent Safety Investigation*

Article 827 of the Italian Navigation Code requires that an aviation accident investigation be conducted following the requirements of ICAO Annex 13.¹⁴⁶ Accordingly, in the "Purpose of the Technical Investigation" section of its Final Report, ANSV notes that it "performs its investigations *with the only purpose of accident and serious incidents prevention, excluding any appraisal of blame or responsibility*."¹⁴⁷ Further, ANSV reports issued upon completion of its accident investigation safeguard the privacy of all individuals involved in the event as well as those who contrib-

¹⁴¹ Alcock, *supra* note 133; Horowitz, *supra* note 140.

¹⁴² Learmount, *supra* note 138. Ultimately, in 2006, an Italian appeals court overturned the convictions of the airport director and the head of Milan's two airports, but upheld the others. *Italian Court Rules on Linate Disaster Convictions*, ALLBUSINESS.COM (July 10, 2006), <http://www.allbusiness.com/operations/shipping-air-freight/1184802-1.html> [hereinafter *Italian Court Rules*]. In February 2008, Italy's highest court affirmed the convictions. Dunn, Colombo & Nold, *supra* note 55, at 16.

¹⁴³ *Italian Court Rules*, *supra* note 131; Christian Plumb, *Court Jails Four over Italy's Worst Air Disaster*, REUTERS (Apr. 17, 2004) [hereinafter *Court Jails Four*] (on file with author).

¹⁴⁴ *4 Convicted in 2001 Milan Plane Crash*, N.Y. TIMES (Mar. 15, 2005), <http://www.nytimes.com/2005/03/14/world/europe/14iht-italy.html> [hereinafter *4 Convicted*]. The air traffic control agency was implicated because an inoperative ground radar system was found to have contributed to the accident. *Court Jails Four*, *supra* note 143.

¹⁴⁵ *4 Convicted*, *supra* note 144.

¹⁴⁶ ANSV Final Report (Linate), *supra* note 132, at VII.

¹⁴⁷ *Id.*

uted information to the investigation, proclaiming “[a]nonymity will be granted to all persons involved in the events. . . . *Reports and associated Safety recommendations are never intended to apportion blame or responsibility.*”¹⁴⁸

3. *Consequences of Competing Investigations*

Nevertheless, despite ANSV’s established non-punitive investigative role, the convergence of multiple investigative bodies as early as the night of the Linate incident created conflict and presented challenges with regard to access to critical evidence: “‘We’re not even allowed to look at the plane tonight, because there’s a fight between the two Italian’ investigating authorities, a local Milan magistrate and the national Transportation Security Agency, an SAS investigator,” unable to initiate his investigative work, commented.¹⁴⁹ The safety investigators in charge of the investigation complained that they were unable to receive testimonies from the ground and tower controllers, as well as the tower supervisor, who made themselves unavailable pending the judicial procedure.¹⁵⁰ The original tape of the radio and telephone communications was not provided, and because the Magistrate seized certain equipment from the Cessna aircraft for purposes of the criminal inquiry, the safety investigators’ ability to test the efficiency of such equipment was compromised.¹⁵¹

Indeed, the ANSV’s Final Report itself notes that “[c]ertain information and evidence, not relevant to the dynamics of the accident or to its causes, have been seized and kept in custody by the Magistrate conducting the criminal inquiry and could not be used for this investigation.”¹⁵² While the referenced information was requested by ANSV, it had not been obtained by the date of the Final Report’s publication.¹⁵³

B. CROSSAIR CRASH (ZURICH, SWITZERLAND)

While the criminal inquiry into the 2001 crash of Crossair regional jet Flight 3597 did not proceed until *after* the safety investigation was concluded, the protracted prosecution had devastating consequences for the implicated individuals and the

¹⁴⁸ *Id.*

¹⁴⁹ Melinda Henneberger, *Small Plane Collides with Jet on Milan Runway; 118 Die*, N.Y. TIMES, Oct. 9, 2001, at A3, *available at* 2001 WLNR 3349874.

¹⁵⁰ EC Staff Working Document, *supra* note 26, § 3.3.1.1 (Case 1).

¹⁵¹ *Id.*

¹⁵² ANSV Final Report (Linate), *supra* note 132, at VIII.

¹⁵³ *Id.*

struggling airline alike—regardless of the eventual acquittal of all those charged.¹⁵⁴

Crossair, Swissair's designated successor created in an effort to sustain a viable airline following the demise of Switzerland's bankrupt national carrier, was already saddled with the blot of a 2000 accident in which ten people died shortly after takeoff, the baggage of its predecessor's financial woes, employee protests over layoffs and severance packages, and Switzerland's struggling airline industry generally, which was attempting to regain passenger confidence following the 9/11 terrorist attacks in the United States.¹⁵⁵

Then, on November 24, 2001, the Avro 146 RJ100 regional jet (registration HB-IXM) crashed into a wooded range of hills during final approach to Zurich International Airport.¹⁵⁶ The investigation performed by Switzerland's Federal Bureau of Air Accident Investigation (AAIB) concluded that this controlled flight into terrain was primarily caused by, among other factors, the flightcrew's deliberate descent "below the minimum altitude . . . without having the necessary prerequisites."¹⁵⁷ Twenty-four of the thirty-three people onboard were killed.¹⁵⁸

¹⁵⁴ See discussion *infra* Part IV.B.1–2.

¹⁵⁵ *Managers Charged over Fatal Crossair Crash*, SWISSINFO.CH (Oct. 26, 2007), http://www.swissinfo.ch/eng/Managers_charged_over_fatal_Crossair_crash.html?cid=6215422 [hereinafter *Managers Charged*]; Elizabeth Olson, *Crash Deals New Blow to Revival of Swiss Airline*, N.Y. TIMES, Nov. 27, 2001, at W1, available at 2001 WLNR 3378704. Crossair eventually became Swiss International Airlines, which was then acquired by the German company, Lufthansa. *Culture of Fear Blamed for Zurich Air Crash*, SWISSINFO.CH (Apr. 28, 2008), http://www.swissinfo.ch/eng/news_digest/index/Culture_of_fear_blamed_for_Zurich_air_crash.html?cid=6617240.

¹⁵⁶ Aircraft Accident Investigation Bureau of Switzerland, *Final Report No. 1793 Concerning the Accident to the Aircraft AVRO 146-RJ100, HB-IXM, Operated by Crossair Under Flight Number CRX 3597 on 24 November 2001 near Bassersdorf/2H*, at 11–12, Doc. HB-IXM (CRX 3597) (2001).

¹⁵⁷ *Id.* at 12–13. Other factors cited as contributing to the crash were the lack of a minimum safety altitude warning (MSAW), an overworked and fatigued pilot, inappropriate task-sharing between the flight crew during the approach (with the captain failing to cede responsibility for observation of outside visual reference points to his co-pilot in order to closely monitor his instruments and the aircraft's altitude), the absence of any marking designating the range of hills on the approach chart used by the flight crew, and the inappropriate decision to use a VOR/DME approach on the particular runway given the valid visual minimums. *Id.*

¹⁵⁸ *Id.* at 12.

1. *Independent Safety Investigation*

The final accident report released by the Swiss aircraft accident investigators¹⁵⁹ concluded that the pilot of Crossair Flight 3597 was “overtired,” overworked, and “flying too low” as he attempted to negotiate the landing in poor weather conditions after dark.¹⁶⁰ The report also identified a history of safety infractions by the commanding pilot (which were not acted upon by Crossair management), as well as a compromised safety culture and “poor pilot training” at the airline.¹⁶¹

2. *Involvement of Criminal Authorities*

Following the report’s release in 2004, Swiss federal prosecutors initiated a criminal inquiry that focused solely on individuals; Mr. André Dosé, the chief executive of Crossair at the time of the accident, was placed under investigation in connection with the 2001 crash.¹⁶² Amidst speculation that he could face legal action for negligent homicide and other charges, Mr. Dosé resigned from his then-current position as chief of Swiss International Airlines (or “Swiss,” which had been formed out of Crossair).¹⁶³ Mr. Dosé’s resignation, combined with the criminal investigation, put the airline on even shakier ground.¹⁶⁴

The Swiss Federal Prosecutor’s Office also targeted the head of Switzerland’s Federal Office for Civil Aviation, who resigned “after a report by a Dutch aviation institute [instructed] the Swiss to improve air safety following a series of aviation accidents,” as well as the operations chief and chief pilot trainer at Crossair.¹⁶⁵

¹⁵⁹ In the Swiss Aircraft Accident Investigation Bureau (AAIB) Report’s “General remarks,” it notes that “the sole objective of the investigation of an accident or incident shall be the prevention of accidents and incidents. It is not the purpose of this activity to apportion blame or liability.” *Id.* at 2. Moreover, “[a]ccording to art. 24 of the Swiss Air Navigation Law the legal assessment of accident/incident causes and circumstances is no concern of the investigation.” *Id.*

¹⁶⁰ Fiona Fleck, *Swiss open Formal Inquiry into Ex-Crossair Executives*, INT’L HERALD TRIB., Mar. 13, 2004, at 13, available at 2004 WLNR 5225685. The Bureau noted that the pilot was in violation of “Swiss legal limits on maximum flying time for two days [prior to] the crash,” and had been working for more than 13 hours at the time of the accident. *Id.*

¹⁶¹ *Id.*; *Managers Charged*, *supra* note 155.

¹⁶² Fleck, *supra* note 160.

¹⁶³ *Id.*

¹⁶⁴ Fiona Fleck, *International Business; Ex-Airline Chief Scrutinized for Any Link to Swiss Crash*, N.Y. TIMES, Mar. 13, 2004, at C4, available at 2004 WLNR 5540059.

¹⁶⁵ Fleck, *supra* note 160.

Three years later, in October 2007, after the victims' families had already been financially compensated, the Federal Prosecutor's Office announced that six managers had been charged with "negligent homicide and grievous bodily harm" by negligence in connection with the 2001 Crossair crash.¹⁶⁶ These offenses, which "carry a maximum three-year prison sentence or a fine,"¹⁶⁷ were based on the prosecutor's conclusion that the Crossair pilot was "unfit to fly as a captain."¹⁶⁸ Further, the prosecutor alleged that Crossair founder, Moritz Suter, and his successor, Dosé, "maintained a 'culture of fear' among their pilots," preventing them from reporting incidents and instructing them to compromise safety rules in an effort to keep airline costs down.¹⁶⁹ To convict, the prosecutor had to "prove that decisions made by [the charged] executives directly contributed to the crash."¹⁷⁰

On May 16, 2008, nearly seven years after the crash, a Swiss federal court acquitted the ex-Crossair employees of all charges.¹⁷¹

As exemplified by the crashes discussed herein, criminal prosecutions in the aviation sphere tend to do more harm than good. Criminal investigations and prosecutions are often protracted events that persist for many years after an accident occurs. By the time a trial takes place, the technical investigation may be long concluded, victims' families have often been compensated years before, and safety recommendations derived from the circumstances of the crash have already been issued and implemented.

The criminal trial arising out of the 1992 Air Inter crash did not begin until fourteen years after that accident—well after rec-

¹⁶⁶ *Managers Charged*, *supra* note 155.

¹⁶⁷ *Id.*

¹⁶⁸ Thomas Stocker, *Crossair Executives Indicted for Homicide by Neglect*, AVIATION INT'L NEWS (Mar. 1, 2008), <http://www.ainonline.com/news/single-news-page/article/crossair-executives-indicted-for-homicide-by-neglect-13575/>.

¹⁶⁹ Thomas Stocker, *Prosecution Names Suter, Dosé in Indictments*, AVIATION INT'L NEWS (Apr. 28, 2008), <http://www.ainonline.com/news/single-news-page/article/prosecution-names-suter-dose-in-indictments-14318/>; *see also* Thomas Stocker, *Crossair Execs Found Not Guilty in Homicide Trial*, AVIATION INT'L NEWS (June 1, 2008), <http://www.ainonline.com/news/single-news-page/article/crossair-execs-found-not-guilty-in-homicide-trial-16143/> [hereinafter *Crossair Execs Found Not Guilty*].

¹⁷⁰ *Crossair Bosses Face Damaging Allegations*, SWISSINFO.CH (May 5, 2008), http://www.swissinfo.ch/eng/Home/Archive/Crossair_bosses_face_damaging_allegations.html?cid=6632010.

¹⁷¹ *Crossair Execs Found Not Guilty*, *supra* note 169.

ommended safety modifications were made to the Airbus autopilot onboard.¹⁷² The Air France Concorde crash case finally went to trial a decade later—years after the victims' families were compensated and the aircraft at issue was permanently retired from service.¹⁷³ In the meantime, those under investigation or indictment must live with the stress of the looming threat of prosecution, while the inefficient prosecutorial process hemorrhages time and resources.¹⁷⁴

By contrast, the agencies responsible for conducting the safety investigations operate according to a more reasonable timeline; ICAO Annex 13 states that “[i]n the interest of accident prevention, the State conducting the investigation of an accident or incident shall release the Final Report as soon as possible,” recommending its completion “within twelve months of the date of occurrence.”¹⁷⁵ In the event the report cannot be finalized within that time, the state should release interim reports “on each anniversary of the occurrence, detailing the progress of the investigation and any safety issues raised.”¹⁷⁶ Similarly, NTSB accident reports typically issue within twelve and eighteen months after an accident,¹⁷⁷ and EU Directive 94/56/EC calls for a report “to be issued in the shortest possible time and if possible within 12 months.”¹⁷⁸

Moreover, the inevitable conflicts that emerge from different investigating agencies competing for access to the same evidence can lead to substantial delays in the safety investigation, not to mention the risk of collecting incomplete information as a result of interviewees' reticence in the face of possible prosecution.¹⁷⁹

The risk of a criminal conviction may also have direct consequences in the civil context—an insurance carrier's exposure to

¹⁷² See *supra* Part III.D.3.a.

¹⁷³ See *supra* Part III.D.4.a.

¹⁷⁴ “It's certainly an ominous development for global aviation and insurers to face the prospects of criminal liability even after they've long settled the civil cases The costs of a 10-year investigation and four-month trial can be staggering.” Zack Phillips, *Airline Faces Criminal Trial over Fatal Concorde Crash*, BUS. INS., Feb. 8, 2010, at 4, available at <http://www.businessinsurance.com/article/20100207/ISSUE01/302079975> (quoting Kenneth P. Quinn).

¹⁷⁵ Annex 13, *supra* note 2, § 6.5.

¹⁷⁶ *Id.* § 6.6

¹⁷⁷ Dempsey, *supra* note 37, at 271–72.

¹⁷⁸ EC Staff Working Document, *supra* note 26, at 11–12, tbl.1.

¹⁷⁹ See *id.* § 3.3.1.1.

larger settlement figures may rise or the airline may face punitive damages.¹⁸⁰

Even in countries where criminal investigations and prosecutions are more common, convictions are rare; and even when handed down, they routinely get reversed on appeal.¹⁸¹ This prompts serious skepticism about the long-term value of protracted, expensive criminal investigations that may interfere with critical safety analyses in their wake.

V. THE JOINT RESOLUTION REGARDING CRIMINALIZATION OF AVIATION ACCIDENTS AND ITS EFFECTS

Against this background of increasing criminal prosecutions, in an attempt to protect the free flow of critical safety information, an unprecedented Joint Resolution Regarding Criminalization of Aviation Accidents (Joint Resolution) was issued in Fall 2006 and originally approved by the Flight Safety Foundation (FSF), the Royal Aeronautical Society (RAeS), the Academie Nationale de l'Air et de l'Espace (ANAE), and the Civil Air Navigation Services Organisation (CANSO).¹⁸² Other agencies, such as the International Federation of Air Traffic Controllers' Associations, joined soon thereafter, and in 2010, the International Society of Aviation Safety Investigators (ISASI) signed on.¹⁸³

The Joint Resolution recognizes "the importance in civil aviation accident investigations in securing the free flow of information to determine the cause of accidents and incidents and to prevent future accidents and incidents."¹⁸⁴ It acknowledges that the "predominant risk of criminalization . . . is the refusal of witnesses to cooperate with investigations, as individuals . . . [may] choose not to freely admit mistakes."¹⁸⁵ As the "vast majority of aviation accidents result from inadvertent, and often multiple, human errors," and "*being convinced* that criminal investigations and prosecutions in the wake of aviation accidents

¹⁸⁰ Phillips, *supra* note 174.

¹⁸¹ See, e.g., discussion *supra* Parts III.D.3., IV.B.2.

¹⁸² *Joint Resolution Regarding Criminalization of Aviation Accidents*, 1, 4 (Oct. 17, 2006) [hereinafter *Joint Resolution*], available at flightsafety.org/files/resolution_01-12-10.pdf.

¹⁸³ *Id.* at 5; Ramon Lopez, *Accident Investigators Sign Criminalization Resolution*, AIR SAFETY WEEK (Jan. 22, 2010), http://www.aviationtoday.com/asw/topstories/Accident-Investigators-Sign-Criminalization-Resolution_65883.html.

¹⁸⁴ *Joint Resolution*, *supra* note 182, at 1.

¹⁸⁵ *Id.* at 2.

can interfere with the efficient and effective investigation of accidents and prevent the timely and accurate determination of probable cause and issuance of recommendations to prevent recurrence,” the document essentially proposes five “resolutions”:

- (1) “that the paramount consideration” in a post-accident investigation is the determination of probable cause, not the punishment of the key players;
- (2) that absent clear evidence of criminal intent, criminalization of aviation disasters is not an effective deterrent or in the best interests of public safety;
- (3) that States “exercise far greater restraint” before initiating criminal investigations, as the aviation system and disaster victims are better served by “strong regulatory oversight” and the pursuit of civil claims to obtain compensation;
- (4) that States “safeguard the safety investigation report and probable cause/contributing factor conclusions from premature disclosure” or use in civil or criminal proceedings, as technical and legal causes should not be equated; and
- (5) that national aviation and accident investigating authorities exert control over investigations to keep them “free from undue interference from law enforcement” so they may serve as effective vehicles in uncovering critical safety information and making improvements for the industry’s future.¹⁸⁶

While this Joint Resolution may be viewed as merely a policy statement with no “teeth,” following its passage, it appeared that prosecutors responded, in part, by being less likely to indict “people on the line,” and instead shifted their focus to upper management and corporate executives “accountable for failed systems” following an aviation disaster.¹⁸⁷ Indeed, in acquitting the individuals charged in the Air Inter case, the French court cited the newly issued Joint Resolution in its verdict, which exacted damages only on the aircraft manufacturer and airline.¹⁸⁸ This recognition that the individual pilot, co-pilot, or mechanic “on the ground” typically lacks the requisite criminal intent to justify prosecution prompts criminal authorities to target the decision-makers, or the corporate entity (such as the airline) as a whole, for faulty safety policies or their enforcement.¹⁸⁹ “A corporation may be held vicariously liable . . . for the unlawful conduct of its employees, provided that such conduct is within the

¹⁸⁶ *Id.* at 2–3.

¹⁸⁷ Werfelman, *supra* note 3, at 16 (quoting Flight Safety Foundation President, William Voss).

¹⁸⁸ Quinn, *supra* note 1.

¹⁸⁹ *Id.* at 11–13.

scope of the employee's authority and performed for the benefit of the corporation"—"even if the employee's actions are against explicit corporate policy."¹⁹⁰ Similarly, the "collective knowledge doctrine" provides that a corporation is imbued with "the totality" of the knowledge possessed by its employees.¹⁹¹ This doctrine, while insufficient to establish specific criminal intent, has been utilized by state and federal prosecutors alike to attempt to establish such intent against a corporation for actions that led to a fatal airline crash.¹⁹²

Problematically, while the pilots may lack intent, the targeted corporate executives typically "lack[] the particularized knowledge, skill, [and] training . . . of those who are most likely to be the true agents of wrongdoing" within the company.¹⁹³ Effectively, executives are prosecuted for their subordinates' failure to adhere to "the standard[] of care imposed upon them individually by the FARs."¹⁹⁴ Therefore, in their attempt to avoid targeting those individuals who clearly lacked the intent to commit a crime (e.g. the pilot, flightcrew, and those who have routine contact with and maintenance responsibilities for the aircraft), prosecutors may seek to punish those with an even more tenuous connection to the accident's occurrence or the failures that contributed to it.

VI. PROPOSED SOLUTIONS FOR IMPROVEMENT

Given the troubling consequences of the current environment of increased criminal prosecutions following an air crash, it behooves the aviation industry to consider potential initiatives to restore and protect the primary objective of fostering aviation safety. A few compelling proposals follow.

¹⁹⁰ NTSB Bar Ass'n, *supra* note 21, at 915 (citing various cases).

¹⁹¹ *Id.* at 919 (citing *United States v. Bank of New England*, 821 F.2d 844 (1st Cir. 1987)).

¹⁹² *Id.* at 919–20 (referring to the SabreTech prosecution, in which federal authorities sought to broaden the scope of what could be considered to prove corporate intent to include not only employee knowledge, but "information contained in corporate files and manuals," regardless of the employees' awareness of the same).

¹⁹³ *Id.* at 916.

¹⁹⁴ *Id.* at 917.

A. ESTABLISHMENT OF A GLOBAL STANDARD FOR CRIMINAL
LIABILITY IN THE AVIATION CONTEXT

1. *A Lack of Intent = A Lack of Deterrence: The Unintended Effects
of Criminalizing Unintentional Harm*

Perhaps most concerning about the interjection of criminal law enforcement into the post-air-disaster realm is the consequence that pilots or other aviation professionals are being prosecuted for acts of mere negligence, without criminal intent.¹⁹⁵ A clearly defined international standard of what qualifies as willful misconduct for the purpose of imposing criminal sanctions in the context of aviation disasters is warranted. There should be global recognition and enforcement of the principle that, in the absence of the adequate mens rea, above and beyond mere negligence, criminal investigations and prosecutions are not appropriate.

As one source aptly stated:

Unless there is evidence of an intentional wrong, there can be little justification for criminal prosecution. Often, an accident has been caused by simple, ordinary negligence. Criminalization of aviation accidents may actually be detrimental to safety. Absent intentional harm, we must retreat from the notion that vengeance must be exacted whenever human lives are lost.¹⁹⁶

Deterrence of future aviation disasters is better served by the existing administrative and civil remedies than by the threat of criminal prosecution; “[c]riminal sanctions are ineffective to deter behavior that is neither intended nor foreseen.”¹⁹⁷ Indeed, “[a]pproximately seventy-five [percent] of aircraft accidents in the United States involve some form of human error.”¹⁹⁸ When a crash is the result of mere mistake, one of the predominant goals of exacting criminal punishment—deterrence—is lost.¹⁹⁹ The drawbacks of increased criminal prosecutions—namely, expense, interference with safety investigations, and potentially devastating consequences to aviation professionals and corporations alike—therefore become even more concerning in the face of their minimal benefit.

¹⁹⁵ See, e.g., *United States v. SabreTech, Inc.*, 271 F.3d 1018 (11th Cir. 2001).

¹⁹⁶ Dempsey, *supra* note 37, at 282–83.

¹⁹⁷ NTSB Bar Ass’n, *supra* note 21, at 920.

¹⁹⁸ *Id.* at 904; Quinn, *supra* note 1, at 11 (stating that “[m]ost accidents are the result of human errors”).

¹⁹⁹ See Quinn, *supra* note 1, at 11–12.

In a 2007 presentation at an ICAO regional seminar, Captain Paul McCarthy, the International Federation of Air Line Pilots' Associations' (IFALPA) representative to ICAO, artfully characterized this as "'the fundamental principle that punishment does not improve safety' because the threat of punishment—which may deter *intentional* acts—has no effect on *unintentional* errors that lead to accidents."²⁰⁰ The Joint Resolution recognizes the same principle: "Increasing safety in the aviation industry is a greater benefit to society than seeking criminal punishment for those 'guilty' of human error or tragic mistakes."²⁰¹

Courts in the United States have been less willing than elsewhere to prosecute without the requisite criminal intent. In *State v. Chapman*,²⁰² for example, the court held that an involuntary manslaughter conviction "requires a showing of gross negligence [exemplified by] conduct that amounts to wanton or reckless disregard for human life"—not mere negligence.²⁰³ There, a military pilot was on trial for the deaths of three Maryland residents caused by his unoccupied B-25 bomber crashing into a home.²⁰⁴ The evidence revealed that, after extensive consultation with military authorities on the ground, his fellow pilots, and maintenance personnel, the decision was made to abandon the aircraft.²⁰⁵ The court held the pilot's conduct did not amount to gross negligence and noted that "[i]f the resultant deaths were merely accidental or the result of a misadventure or due to simple negligence, or an honest error of judgment in performing a lawful act, the existence of gross negligence should not be found."²⁰⁶ Likewise, in reversing the reck-

²⁰⁰ Werfelman, *supra* note 3, at 16–17 (emphasis added). Likewise, the International Federation of Air Traffic Controllers (IFATCA) said that "'experience has shown that criminal prosecution makes no contribution to improving system safety.'" *Id.* at 17.

²⁰¹ *Joint Resolution*, *supra* note 182, at 3; *see also* Quinn, *supra* note 1, at 11 (noting the recent trend among prosecutors and judges worldwide to turn "the powerful weapons of criminal prosecution against what are simply tragic accidents, the result of mistakes, not willful actions").

²⁰² *State v. Chapman*, 101 F. Supp. 335 (D. Md. 1951).

²⁰³ NTSB Bar Ass'n, *supra* note 21, at 921–22 (citing *Chapman*, 101 F. Supp. at 341).

²⁰⁴ *Chapman*, 101 F. Supp. at 336–37.

²⁰⁵ *Id.* at 338–39.

²⁰⁶ *Id.* at 341. "Negligence" is the failure to "exercise reasonable care under all the circumstances." RESTATEMENT (THIRD) OF TORTS § 3 (Proposed Final Draft No. 1 2005). Conversely, "reckless conduct," or "willful or wanton misconduct," occurs when one knows or should know of the "risk of harm created by the con-

lessness convictions against SabreTech, the Eleventh Circuit acknowledged that while “these aviation repair station personnel committed mistakes, . . . they did not commit crimes,” and “did not intend to kill” the accident victims.²⁰⁷

ICAO standards, too, reinforce that discipline or punishment of those involved in an aviation accident is only appropriate where evidence shows the event “was caused by an act considered, in accordance with the law, to be conduct with *intent to cause damage*, or conduct with knowledge that damage would probably result, equivalent to *reckless conduct, gross negligence or wilful misconduct*.”²⁰⁸ At present, however, this reluctance to charge and convict for mere negligence is troublingly not universal.

2. *Criminalization of Merely Negligent Acts Would Not Benefit Defendants in Civil Negligence Actions*

Interestingly, the unintended negative consequences of criminalization discussed above would not be counter-balanced by the unintended benefits to civil defendants. That is, potential defendants would still be exposed to liability in civil negligence actions arising from aviation disasters, even if other actors were criminally prosecuted for causing the same harm.

In the tort law context, defendants accused of negligence could, in past years, escape liability by showing that some other action was an intervening, “superseding cause” of the harm.²⁰⁹

duct” and “fail[s] to adopt [a] precaution” against such harm. *Id.* § 2. “Willful” in the criminal context “is a word of many meanings”—it can mean that the actor “intended to violate the law or to injure another,” or it can “include an element of knowledge on the actor’s part that his . . . conduct is harmful and . . . unlawful.” 21 AM. JUR. 2D *Criminal Law* §130 (2011). Of note, a Working Paper presented by Australia at the 37th ICAO Assembly Session acknowledges the complications inherent in importing “decidedly legal concepts” such as “willful,” “deliberate,” “recklessness,” and “gross negligence” into a discussion of “just culture” and resolutions aimed to distance the world of aviation safety from the judicial realm. *Some Caveats on “Just Culture”* 5 (Int’l Civil Aviation Org., Working Paper No. A37-WP/289, TE/149, (2010)).

²⁰⁷ *United States v. SabreTech, Inc.*, 271 F.3d 1018, 1019, 1025 (11th Cir. 2001).

²⁰⁸ ICAO, *Amendment 11 to the International Standards and Recommended Practices, Aircraft Accident and Incident Investigation, Annex 13, Attachment E*, at 3–4 (2006) [hereinafter *Attachment E*] (emphasis added) (providing that safety information should be protected from disclosure to, or use by, disciplinary or criminal authorities unless there is evidence that an occurrence was caused by conduct involving this level of intent).

²⁰⁹ See RESTATEMENT (SECOND) OF TORTS § 440 (1965).

An intervening, superseding act was one that was both unforeseeable and *intentional*.²¹⁰ But tort law treatises also set forth the rule that intervening criminal acts cut off negligence liability as a matter of law.²¹¹ It is clear that the assumption underlying this rule was that all criminal acts are intentional, or at least committed with a culpable state of mind. Thus, for example, the *Restatement (Second) of Torts* offers the example of a railroad that “negligently derails a tank car full of gasoline and damages it,” causing the gasoline to run into the public street; the railroad’s liability for negligence is cut off when another party “deliberately sets fire to the gasoline.”²¹² Under this former regime, defendants in civil negligence actions arising from aviation disasters may have been able to advance a tenable argument that they should not be held liable in negligence if someone else had already been criminally charged with causing the disaster.

Over the past few decades, however, this rigid two-prong doctrine has been abandoned in favor of a foreseeability analysis under which a negligent defendant is held liable for all harm created by the risks of its negligent acts.²¹³ Courts favor this more flexible approach, recognizing that “the criminality of [an] act does not, by that fact alone, render such act unforeseeable.”²¹⁴ In one case, an aircraft passenger died when his plane collided with power lines spanning a canyon; the passenger’s wife sued the power company for negligence, alleging that it failed to mark the power lines or otherwise warn of their presence.²¹⁵ In its defense, the power company argued that any negligence on its part was superseded by the fact that the pilot had been flying too low in the vicinity of a town, in violation of FAA regulations.²¹⁶ The appellate court disagreed, holding that the criminal act of a third party does not sever a defendant’s liability for negligence *if the criminal act is reasonably foreseeable*.²¹⁷ Because the power company could have foreseen that pilots would fly in the vicinity of the canyon, it was liable for negligently fail-

²¹⁰ *Id.* § 442B.

²¹¹ *See id.* § 442B, cmt. c; *see also* RESTATEMENT (THIRD) OF TORTS § 34 cmt. e (Proposed Final Draft No. 1 2005).

²¹² RESTATEMENT (SECOND) OF TORTS § 442B cmt. c, illus. 6, 8 (1965).

²¹³ RESTATEMENT (THIRD) OF TORTS § 34 cmt. e (Proposed Final Draft No. 1 2005).

²¹⁴ *See, e.g.,* Sewell v. Pub. Serv. Co., 832 P.2d 994, 999 (Colo. App. 1991).

²¹⁵ *Id.* at 995.

²¹⁶ *Id.* at 995–96.

²¹⁷ *Id.* at 999 (citing *Perreira v. State*, 768 P.2d 1198 (Colo. 1989)).

ing to mark the lines.²¹⁸ As courts now adhere to this foreseeability analysis in negligence cases, defendants typically cannot escape liability by the mere fact that another actor is criminally charged in connection with an aviation disaster.²¹⁹ Thus, criminalization of merely negligent acts will not result in unintentional benefits to defendants in civil negligence actions.

3. *Regulatory Remedies and Investigations Render Criminal Prosecution Unnecessary*

In addition to serving no deterrent purpose, criminal prosecutions are not necessary to promote aviation safety in light of the procedures already in place. In the United States, for example, the threat of FAA legal enforcement has long been sufficient to deter errant conduct by aviation professionals, particularly in light of this agency's power over the certificates that are pre-requisites for these professionals' continued employment—in addition to the potential for other penalties and fines.²²⁰

Moreover, the NTSB already employs an established procedure for thoroughly investigating an accident's circumstances, determining its probable causes, and generating safety recommendations for the future.²²¹ Supplemental criminal inquiries are not necessary.²²² The respect and veneration for the effectiveness of the NTSB in identifying the root causes of a crash and ensuring they are not repeated is widespread. As one source notes, "the U.S. Aviation industry has worked astonishingly well in the past, without the help of criminal law enforcement," attributing this success to the aviation community's cooperation with the NTSB.²²³ Another author acknowledged

²¹⁸ *Id.* at 998–99. Commonplace infractions are not the only unlawful acts that have been held to be foreseeable in negligence cases. In fact, and astonishingly, the U.S. District Court for the Southern District of New York held in 2003 that the airlines involved in the September 11, 2001, terrorist attacks had a duty of care to properly screen passengers, and that the acts of terrorism and subsequent harm were within the class of foreseeable hazards resulting from negligently performed security screenings. *In re September 11 Litigation*, 280 F. Supp. 2d 279, 293–94, 296 (S.D.N.Y. 2003). Although the September 11 litigation may have been exceptional, it nonetheless evidences the potentially far-reaching effects of the foreseeability doctrine.

²¹⁹ *See Sewell*, 832 P.2d at 999.

²²⁰ NTSB Bar Ass'n, *supra* note 21, at 922–23.

²²¹ *About the NTSB: The Investigative Process*, NAT'L TRANSP. SAFETY BD., http://www.ntsb.gov/abt_ntsb/invest.htm (last visited May 29, 2011).

²²² *Id.*

²²³ Dunn, Colombo & Nold, *supra* note 55, at 17.

the “enormous influence” exerted by the NTSB, “based on the independence and accuracy of its accident investigations and the authority of its recommendations.”²²⁴ Regardless of whether criminal prosecutions ultimately result in convictions, their threat alone has a deleterious effect. Protracted criminal investigations in and of themselves inspire aviation professionals to remain tight-lipped, impeding the NTSB’s indispensable safety-oriented objectives.²²⁵

4. *Self-Preservation, More Than Avoidance of Punishment, Serves as an Incentive to Stay Safe*

Finally, aviation professionals—particularly flightcrew—are subject to the greatest incentive of all: their own self-preservation. There is little need to deter negligence among pilots and their crew when unsafe conduct would likely result in their becoming the unwilling victims of their own negligence.²²⁶ Corporations, too—such as aircraft manufacturers and airlines—face serious threats to their own “survival” from negative press following an aviation disaster in an industry in which a tarnished reputation could serve as a “death sentence.”²²⁷ This prompts corporations to increase their attention to safety measures for business survival and success, if for nothing else.

5. *Not Above the Law*

Nevertheless, the aviation industry recognizes that criminal prosecutions are appropriate whenever criminal activity is suspected as a contributing cause of an aviation accident. For example, where terrorism is clearly at an accident’s root, such as in the September 11, 2001, attacks on the World Trade Center and the Pentagon, the promotion of safety is best served by the criminal law enforcement authorities immediately assuming control of the scene and its investigation.²²⁸ Evidence of clear criminal intent also exists in cases of hijacking, piloting while intoxicated, and aircraft theft.²²⁹ As former NTSB Chairman Jim Hall remarked, “[t]he Board’s intent is not to prevent prosecutions, but rather to prevent them from preempting or thwarting a

²²⁴ Dempsey, *supra* note 37, at 272.

²²⁵ See NTSB Bar Ass’n, *supra* note 21, at 911, 922.

²²⁶ *Id.* at 923.

²²⁷ See, e.g., Quinn, *supra* note 1.

²²⁸ NTSB Bar Ass’n, *supra* note 21, at 890.

²²⁹ *Id.* at 923.

thorough safety investigation of a transportation tragedy.”²³⁰ In the United States, Congress has reaffirmed that it is the NTSB that has the authority to determine whether an accident’s cause “was truly accidental.”²³¹ ICAO Annex 13 provides that if, in the course of the investigation, it becomes known or “suspected . . . that an act of unlawful interference was involved, the investigator-in-charge shall immediately initiate action to ensure that the aviation security authorities of the [relevant] State(s) concerned are so informed.”²³² However, where evidence suggests that an accident was caused by mere negligence—such as pilot error or a mechanic’s mistake—criminal investigation is not justified.²³³

In short, aviation safety would be well-served by the establishment of an international standard defining the requisite criminal intent before prosecution is initiated.

B. VOLUNTARY REPORTING SYSTEMS

It is critical to establish non-punitive incident reporting systems to encourage the free flow of safety information without consequence. This enables those most intimately involved with the regular workings of the aviation industry to share safety-related concerns—before an accident results—without fear of punishment.

ICAO Annex 13 requires that each state set up “a mandatory incident reporting system to facilitate [the] collection of information on actual or potential safety deficiencies.”²³⁴ In addition, ICAO recommends the establishment of a voluntary incident reporting system that is “non-punitive and afford[s] protection to the sources of the information.”²³⁵ The states would analyze the information gathered through their reporting systems “to determine any preventative actions required.”²³⁶ ICAO further recommends that states promote safety information sharing networks to facilitate the free exchange of safety information.²³⁷

²³⁰ Hall Remarks, *supra* note 42.

²³¹ NTSB Bar Ass’n, *supra* note 21, at 884.

²³² Annex 13, *supra* note 2, at 5-3.

²³³ NTSB Bar Ass’n, *supra* note 21, at 884.

²³⁴ Annex 13, *supra* note 2, at 8-1.

²³⁵ *Id.* ICAO goes on to note that “[a] non-punitive environment is fundamental to voluntary reporting.” *Id.*

²³⁶ *Id.*

²³⁷ *Id.*

In 2006, Attachment E to Annex 13 was adopted to provide legal guidance for the protection of safety data gathered during investigations.²³⁸ Attachment E provides “[p]rinciples of protection” for information that was collected explicitly for safety purposes, the disclosure of which would “inhibit its continued availability.”²³⁹ The use of such safety information in judicial “proceedings should be carried out only under suitable safeguards provided by national law.”²⁴⁰ Nevertheless, Attachment E also sets forth “[p]rinciples of exception” to the protections granted to safety information where evidence exists that an occurrence was caused “with intent to cause damage, or conduct with knowledge that damage would probably result, equivalent to reckless conduct, gross negligence or [willful] misconduct.”²⁴¹ Moreover, safety information may be disclosed when an “appropriate authority” decides that its release is “necessary for the proper administration of justice” and “outweighs the adverse domestic and international impact such release may have on the future availability of safety information.”²⁴²

These principles, while intended to assist ICAO member states in striking a balance between protection of safety information on the one hand, and disclosure where warranted for the “proper administration of justice” on the other, are simply “guidance”—not requirements.²⁴³

1. *The United States*

Domestically, the FAA enacted the Aviation Safety Reporting Program (ASRP), set forth in FAR § 91.25, which provides limited immunity from FAA sanctions to those pilots, flight attendants, maintenance personnel and other aviation professionals who file a report within ten days of an incident or occurrence to help prevent future incidents.²⁴⁴ In fact, to encourage the reporting of “actual or potential discrepancies and deficiencies” involving aviation safety, the FAA designated NASA as a third

²³⁸ See Attachment E, *supra* note 208, at 1.

²³⁹ *Id.* at 2.

²⁴⁰ *Id.* at 3.

²⁴¹ *Id.*

²⁴² *Id.*

²⁴³ *Id.* at 1–2.

²⁴⁴ NTSB Bar Ass’n, *supra* note 21, at 912 (citing FED. AVIATION ADMIN., AC No. 00-46D, FAA AVIATION SAFETY REPORTING PROGRAM (1997) [hereinafter AC 00-46D]).

party to receive and process the submitted reports.²⁴⁵ This ensures the anonymity of the reporter and any involved parties, further insulating them from FAA regulatory authorities so as to increase the system's effectiveness.²⁴⁶ Because the filing of such reports is considered "indicative of a constructive attitude," the FAA will not use the reports or information obtained therefrom in any disciplinary action, nor will it impose a civil penalty or certificate of suspension if a violation is found.²⁴⁷ However, this protection does not extend to "criminal activit[ies], aircraft accidents, lack of qualifications or competence, intentional actions, or to prior violations by an individual within the previous five years."²⁴⁸

More recently, the FAA implemented two additional reporting systems.²⁴⁹ First, under the Flight-Operations Quality Assurance (FOQA), participating airline operators regularly cull and submit data retrieved from onboard recorders to the FAA so that it may monitor trends and identify risk areas in aircraft operations.²⁵⁰ This data is analyzed to detect technical flaws or unsafe conditions—in areas such as maintenance, engineering, ATC procedures, and airport surface issues—before they result in aircraft accidents.²⁵¹ Data submitted through this program is protected from use in an enforcement action against the submitting operator, unless it relates to a criminal or deliberate act, results from willful misconduct or a willful violation, or the operator is not complying with the program.²⁵²

Second, the Aviation Safety Action Program (ASAP) allows "certain employees of participating air carriers and major repair stations [to] voluntarily report safety issues and events."²⁵³ The report is generally protected from use in any FAA enforcement action, but here, too, the reported information must not appear to involve criminal activity.²⁵⁴

²⁴⁵ AC 00-46D, *supra* note 244, § 1.

²⁴⁶ *Id.* § 3. Where applicable, NASA will "de-identify" all information that might assist in the identification of those filing the ASRS reports within 72 hours of their receipt. *Id.* § 8.

²⁴⁷ *Id.* § 9.

²⁴⁸ NTSB Bar Ass'n, *supra* note 21, at 912–13; AC 00-46D, *supra* note 244, § 9.

²⁴⁹ NTSB Bar Ass'n, *supra* note 21, at 913.

²⁵⁰ *Id.*

²⁵¹ *Id.*

²⁵² *Id.* at 914–15.

²⁵³ *Id.* at 913.

²⁵⁴ *Id.* at 913–14.

These programs are designed so that “pilots, maintenance techs, controllers, [and] even passengers, can [anonymously] submit reports of mistakes or incidents in which safety was compromised without fear of retribution from their employers, aviation regulators or the courts.”²⁵⁵ Congress sought to strengthen the protection afforded to those reporting under these systems; this prompted the FAA to issue FAR Part 193 in 2001, which provides for the non-disclosure of the information reported.²⁵⁶ However, Part 193 includes “significant exceptions”—for example, it does not apply to information provided in the course of a criminal investigation or prosecution and does not protect information from use in enforcement proceedings.²⁵⁷ Legislative efforts for more comprehensive immunity for aviation safety reporting are ongoing.²⁵⁸

2. *Internationally*

Similar reporting systems to those described above have been established abroad as well.²⁵⁹ The FOQA program was actually modeled after one in place at British Airways decades earlier.²⁶⁰ Recently, the European Civil Aviation Conference and Joint Aviation Authority jointly initiated the ECAC/JAA Aviation Safety Action Program.²⁶¹

In addition, the Commission of the European Communities issued a Staff Working Document that highlights the need for a non-punitive reporting system.²⁶² It characterizes open reporting and careful analysis of even the smallest incidents, failures, and other occurrences in daily operations as “the crucial element in prevention of accidents” and hails “occurrence reporting” as “an essential tool in promotion” of a “Just Culture.”²⁶³ Indeed, EU Directive 2003/42/EC significantly contributed to the establishment of a “Just Culture” within the European civil

²⁵⁵ Esler, *supra* note 72.

²⁵⁶ NTSB Bar Ass’n, *supra* note 21, at 914.

²⁵⁷ *Id.*

²⁵⁸ *Id.* at 914–15.

²⁵⁹ Singer, *supra* note 76, at 500.

²⁶⁰ *Id.*

²⁶¹ *Id.*

²⁶² See generally EC Staff Working Document, *supra* note 26.

²⁶³ *Id.* § 2.2.2 (defining “occurrence reporting” as “sophisticated systems which call aviation professionals to report, in a protected environment, errors, abnormal events and other irregular circumstances, and which allow to analyse the data collected in order to draw and disseminate safety lessons and identify safety risks”).

aviation community by obliging member states to ensure confidentiality of the information reported by aviation professionals—and the identity of the reporter—as well as encouraging states to promote the establishment of voluntary occurrence reporting systems.²⁶⁴ The Directive went further to establish a central repository of information on civil aviation occurrences exchanged in accordance with it to better facilitate the dissemination of critical safety information.²⁶⁵

a. “Just Culture”

The concept of “Just Culture,” promoted by the ICAO and the European Community, underscores the international commitment to an open, non-punitive incident reporting environment. In its working paper prepared for presentation at the 2008 Accident Investigation and Prevention Group (AIG) meeting, ICAO defined “Just Culture” as a working environment where “frontline operators or others are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but where gross negligence, [willful] violations and destructive acts are not tolerated.”²⁶⁶ In other words, individuals who report mistakes are not blamed for honest errors that do not rise to the level of willful misconduct; as such, they will be more willing to proactively communicate their own errors or other safety concerns, thereby increasing the likelihood that more serious accidents will be avoided. The paper sets forth evidence that the criminal prosecution of those who filed voluntary reports has caused the collapse of reporting systems, “creating a cover-up culture,” and asks AIG to adopt a just culture description within Annex 13.²⁶⁷ The ICAO proposal urges states to adopt and implement just culture principles within their own legal systems.²⁶⁸

All of these incident reporting efforts aim to facilitate the early detection of potential safety issues in order to avert future disasters. As Flight Safety Foundation President and CEO, Wil-

²⁶⁴ *Id.* § 2.3.2.

²⁶⁵ *Id.*

²⁶⁶ *Id.* § 2.2.2; David Learmount, *ICAO Wants to Make ‘Just Culture’ Safety Reporting and Investigation Global*, FLIGHT GLOBAL (Jan. 8, 2008), <http://www.flight-global.com/articles/2008/08/01/226289/icao-wants-to-make-just-culture-safety-reporting-and-investigation.html> [hereinafter *ICAO Wants to Make ‘Just Culture’ Global*].

²⁶⁷ *ICAO Wants to Make ‘Just Culture’ Global*, *supra* note 266.

²⁶⁸ *Id.*

liam R. Voss, commented: "The safety of the traveling public depends on encouraging a climate of openness and cooperation following accidents Overzealous prosecutions threaten to dry up vital sources of information and jeopardize safety.'"²⁶⁹ If we are to encourage proactive, open communication about safety concerns, we must prioritize the availability, function, and protections granted by voluntary reporting systems throughout the international aviation community.

C. INCREASED AVAILABILITY OF LIMITED IMMUNITY

U.S. courts are reluctant to extend Fifth Amendment protections in the civil aviation setting, absent a "substantial and real possibility of future criminal prosecution."²⁷⁰ However, this fails to recognize that an individual's testimony itself may provide the foundation for his subsequent criminal prosecution—particularly in light of the FAA's obligation to inform the DOJ of any potential criminal violations, and the DOJ's ability to utilize the information gathered during the FAA investigation in its subsequent prosecution of airmen.²⁷¹

To combat the likely chilling effect of this ever-present prosecutorial threat, some form of limited-use immunity should be applied to evidence and witness testimony provided during the safety investigation phase. As the NTSB recommends, "[i]mmunity from prosecution should be available to every witness called upon by the NTSB or the FAA to provide factual information deemed necessary to a determination of the causes-in-fact of the accident."²⁷² Ironically, as noted by the NTSB, prosecutors' willingness to immunize witnesses in order to be privy to the truth of an accident's cause serves as an implicit acknowledgment that "the pursuit of truth for purposes of promoting aviation safety is really the paramount concern in these investigations."²⁷³

²⁶⁹ Werfelman, *supra* note 3, at 13.

²⁷⁰ NTSB Bar Ass'n, *supra* note 21, at 906 (citing *Roach v. Nat'l Transp. Safety Bd.*, 804 F.2d 1147, 1150–51 (10th Cir. 1986)).

²⁷¹ *Id.*

²⁷² *Id.* at 927.

²⁷³ *Id.* at 910.

D. ESTABLISHMENT OF A COORDINATED AGREEMENT AMONG
INVESTIGATIVE AGENCIES

Finally, many in the aviation industry agree that the accident and criminal investigative agencies need to establish a coordinated agreement regarding the conduct and progress of post-accident investigations.²⁷⁴ For example, former NTSB Chairman Hall suggests that such an “agreement must address when a criminal investigation should be initiated” in relation to the safety investigation, as well as “how safety investigations will be conducted to ensure that evidence and information are properly protected.”²⁷⁵ The NTSB concurred with recommendations made to the House of Representatives Aviation Subcommittee urging the NTSB, FAA, and DOJ to “jointly develop a policy that provides specific guidance to prosecutors as to when it is appropriate to institute a criminal investigation of a transportation accident.”²⁷⁶

Indeed, ICAO Annex 13 instructs “[t]he State conducting the safety investigation [to] recognize the need for coordination between the investigator-in-charge and the judicial authorities,” particularly in the gathering of critical evidence, such as flight recorder read-outs and victim examinations.²⁷⁷ The Commission of the European Communities recognized the challenge facing various agencies involved in post-accident investigation to both cooperate—particularly with regard to their mutual need for gathering evidence—while retaining the independence to carry out their divergent purposes.²⁷⁸

By way of example, the Commission cited the multiple investigations that followed the Air France Concorde crash as illustrative of the practical difficulties in achieving this coordination.²⁷⁹ There, three inquiry teams were vying for access to the same physical evidence—the BEA technical investigative team, the prosecutors, and a panel of experts convened by the French

²⁷⁴ See, e.g., *Annex 13*, *supra* note 2, at 5-2; Hall Remarks, *supra* note 42; NTSB Bar Ass’n, *supra* note 21, at 927-28.

²⁷⁵ Hall Remarks, *supra* note 42.

²⁷⁶ NTSB Bar Ass’n, *supra* note 21, at 927-28 (elaborating “that criminal prosecution should be selective and undertaken only when it will enhance the safety or security of the flying public and when it will not impede investigations by the NTSB or the FAA into the causes of the accident”).

²⁷⁷ *Annex 13*, *supra* note 2, at 5-2.

²⁷⁸ EC Staff Working Document, *supra* note 26, § 3.3.1.1.

²⁷⁹ *Id.*

transport minister.²⁸⁰ This resulted in delays and restrictions in the safety experts' access to the crash site and critical evidence.²⁸¹ The Commission noted that this is often the case where judicial authorities claim their investigative efforts take precedence over the technical inquiries, despite the broad principles set forth in Directive 94/56/EC—intended to define the rights of the safety investigators to the crash site and other relevant evidence.²⁸² Similar challenges confronted the safety investigators seeking access to the wreckage following the Linate Airport disaster²⁸³ and the U.S. team involved in the ValuJet investigation.²⁸⁴ Moreover, criminal authorities who inject themselves into an accident investigation at an early stage may do injustice to the inquiry as a whole, as they often lack the technical and industry expertise otherwise possessed by the safety investigators.²⁸⁵

These practical challenges are not mere administrative inconveniences—they may have serious safety consequences, including incomplete findings, delayed issuance of the final report, and inadequate safety recommendations. Nevertheless, even if the safety investigation were allowed to proceed first, as the NTSB suggested,²⁸⁶ the threat of subsequent criminal investigation and prosecution could still hamper information-gathering efforts. As one source cautions, once statements and documentary materials have been disclosed by the relevant witnesses, they may be used by prosecutors to support a subsequent criminal prosecution.²⁸⁷ This creates a troubling dilemma: either counsel will intervene early and aggressively to limit the information communicated to the safety investigators, or witnesses who speak freely may later find themselves, or their employers, subject to criminal charges. As another author articulates, aviation professionals find themselves “having to choose between not incriminating themselves and enhancing the safety of aviation.”²⁸⁸

²⁸⁰ *Id.*

²⁸¹ *Id.*

²⁸² *Id.* § 3.3.1.1–1.2.

²⁸³ See discussion *supra* Part IV.A.3.

²⁸⁴ See discussion *supra* Part III.C.5.

²⁸⁵ See EC Staff Working Document, *supra* note 26, § 3.3–3.3.1.1.

²⁸⁶ Hall Remarks, *supra* note 42.

²⁸⁷ Dunn, Hazouri & Rannik, *supra* note 5, at 17, 25 (citing *United States v. Kordel*, 397 U.S. 1 (1970)) (information produced during civil discovery may form the basis for a subsequent prosecution).

²⁸⁸ MICHAELIDES-MATEOU & MATEOU, *supra* note 3, at 4.

As discussed above, a more robust limited-use immunity would serve to address these concerns.²⁸⁹

Allowing the technical investigation priority also could negatively impact the interests of the judicial authorities involved: the safety investigators may conduct destructive testing on critical evidence obtained from the crash site that cannot be repeated or may otherwise impact the authorities' access to evidence needed to support their developing case.²⁹⁰

Although challenges abound, the aviation industry would benefit greatly from a clear agreement setting forth a protocol for the coordination of safety and judicial investigations.

VII. CONCLUSION

While victims' families may have a natural need to seek revenge and the general public may thirst for retribution, "prosecutors nonetheless should resist the urge to yield to the public clamor,"²⁹¹ and the global aviation industry must reinforce the broader objective of increasing aviation safety to better prevent future accidents.

Despite ICAO's established international framework prioritizing independent safety investigations, judicial authorities continue to inject themselves into the post-aviation accident arena. While more common in certain countries abroad, such as France, this trend has gained some traction domestically as well. Considering the substantial, often decades-long, delay between crash and conviction; the tendency for criminal sanctions (when handed down at all) to be merely reversed on appeal; the weak, if existent, deterrent value of criminal punishment for aviation professionals; the detrimental effects of the threat of prosecution; and the competing interests of safety and criminal investigators, it is not clear what goals are being served by this increased judicial involvement.

While the aviation industry has taken steps to emphasize the importance of protecting the free flow of safety information amidst the growing threat of criminal prosecution through such initiatives as the Joint Resolution and the establishment of voluntary incident reporting systems, the recent Air France Concorde verdict serves as a fresh reminder that the threat of

²⁸⁹ See discussion *supra* Part VI.C.

²⁹⁰ EC Staff Working Document, *supra* note 26, § 3.3.1.1–1.2.

²⁹¹ NTSB Bar Ass'n, *supra* note 21, at 911–12.

implementation of criminal sanctions in the aviation accident context remains all too real.

An established international standard for what constitutes criminal intent in the aviation sphere, the implementation of non-punitive voluntary reporting systems, the increased availability of limited-use immunity to protect information provided during the course of safety investigations, and a coordinated agreement between technical and criminal investigation agencies are among the initiatives that can move us toward ensuring that aviation safety is prioritized over criminal retribution around the world.